

Independent Evaluation of the California High School Exit Examination (CAHSEE): 2006 Evaluation Report

Volume 1

Lauress L. Wise
D. E. (Sunny) Becker
Felicia L. Butler
Lori B. Schantz
Han Bao
Shaobang Sun
Hilary L. Campbell

Prepared for:

California Department of Education
Sacramento, CA
Contract Number: 00-07

October 31, 2006

Executive Summary

Independent Evaluation of the California High School Exit Exam

In 1999, the California legislature established the requirement that students pass a graduation exam in English-language arts (ELA) and mathematics beginning with the Class of 2004. Some modifications to the requirement for the California High School Exit Examination (CAHSEE) were passed in 2002. (For more details on the bills establishing this test and the basis for continuing evaluations and reports, including this one, see Chapter 1 of this report.) In July 2003, after the completion of the 2002–03 school year CAHSEE testing, the State Board of Education (Board) voted to defer the CAHSEE requirement until 2006.

The legislation establishing the CAHSEE in 1999 also called for an independent evaluation of the impact of the CAHSEE requirement. HumRRO has been performing this evaluation since January 2000. This report describes evaluation activities and results from July 2005 through June 2006, the seventh year of the evaluation. Findings from this year's evaluation activities have implications for most aspects of the CAHSEE, from the development of the test itself to how it is used and its impact on specific groups of students. The 2005–06 evaluation activities and findings are summarized briefly here and reported in more detail in the main body of the report under the following chapters:

- Chapter 1: Overview
- Chapter 2: Results from the 2005–06 CAHSEE Administrations
- Chapter 3: A Closer Look at Specific Populations
- Chapter 4: The 2006 Longitudinal Survey of Principals and Teachers
- Chapter 5: Trends in Educational Achievement and Persistence During the CAHSEE Era
- Chapter 6: Key Findings and Recommendations

Analyses of Data from the 2005–06 CAHSEE Administrations

The CAHSEE was administered in September 2005, November 2005, February 2006, March 2006, and May 2006 to 11th and 12th graders who had not yet passed it. All 10th graders in the Class of 2008 were required to participate in the February, March, or May 2006 administration. Results from these administrations were merged with CAHSEE results from previous years. There was some imprecision in matching due to differences in how identifying information was coded. The resulting matched files provide good estimates, but not exact counts, of the cumulative number of students in each high school class who have met the CAHSEE requirements. HumRRO reported results for 12th graders who were facing a June 2006 graduation deadline for passing the CAHSEE after the Fall 2005 administrations and after each of the Winter (February) and Spring (March and May) 2006 administrations.

Detailed analyses of results for 12th graders and comparisons of 10th and 11th grade results to corresponding results in 2005 are reported in Chapter 2. HumRRO also

examined factors related to school-level passing rates and analyzed responses to the student questionnaire that accompanied each of the CAHSEE tests.

Most 12th graders who had not yet passed the CAHSEE continued to work to pass and many did, but nearly 40,000 students did not pass by the end of the 2005–06 school year.

HumRRO's estimates of the numbers of students in the Class of 2006 who did or did not pass the CAHSEE by June 2006 are shown in Table 2.12. Excluding those students in special education who were exempted from the CAHSEE requirement for 2006, about 75,000 students entered their senior year still having to meet the CAHSEE requirement. Just over 36,000 of them met the requirement by June 2006; just under 39,000 did not.

Responses to the student questionnaire indicate that students were, in fact, working hard to meet the requirement. Only 21 percent of 12th graders taking the CAHSEE reported that they did not have to work harder to meet the CAHSEE requirement after taking the ELA test and only 17 percent gave this response after taking the mathematics test (see Table 2.50). More than 40 percent said they were working harder in the courses they were taking and 20 percent said they were taking additional courses because of the CAHSEE requirement. About 15 percent said that they were getting help outside the classroom and 10 percent said they were repeating a course to learn the material better.

Results for 11th graders from the Class of 2007 and 10th graders from the Class of 2008 were the same as the corresponding results for the Class of 2006.

By the end of 11th grade, 78.7 percent of students in the Class of 2007 met the CAHSEE requirement, compared to 78.4 percent of students in the Class of 2006. (See Table 2.23) Cumulative passing rates for 11th graders in the various demographic groups were also nearly identical for 2006 and 2005. Approximately 90 percent of White and Asian 11th graders had met the requirement compared to 69 percent of Hispanic students and 64 percent of African American students (both rates were up one percentage point in 2006). The cumulative passing rate for economically disadvantaged 11th graders increased more than one point, from 66.3 percent to 67.7 percent, but the passing rate for students in special education programs dropped 2 percentage points, from 35.5 to 33.5. The latter results may have been related to ongoing confusion as to whether the exemption for special education students would be extended to the Class of 2007.

Overall, 65 percent of this year's 10th graders (Class of 2008) met the CAHSEE requirement, the same percentage as in 2005. As shown in Table 2.24, the passing rate increased slightly for Native American (from 60 to 61%) and Hispanic (from 51 to 52%) students, but dropped for English learners (from 31 to 27%).

Passing rates for students in demographic groups with low pass rates were lower in schools with a high proportion of similar students.

Over 40 percent of schools with relatively high densities of Hispanic (more than 60%) or African-American (more than 12%) students had passing rates under 50 percent for ELA Hispanic and African American students, while only 6 percent of schools with low densities of Hispanic students (< 20%) had passing rates under 50 percent for Hispanics and African-Americans. For mathematics, the difference between schools with high and low densities of minorities was even more dramatic. Over 48 percent of schools with high densities of Hispanics had Hispanic passing rates below 50 percent compared to only 7 percent of schools with low densities of Hispanics. Similarly, schools with high densities of economically disadvantaged students, English learners, and students with disabilities had lower passing rates for these targeted groups than schools with lower densities. (See Tables 2.32 and 2.33 for more details.)

Results for Specific Populations

HumRRO conducted additional analyses of results for English learners and students with disabilities. These two groups of students have had particular difficulty meeting the CAHSEE requirement. New information on English learners, including dates they first enrolled in U.S. schools and the date that some of these students were reclassified as fluent in English, information about each student's English language development program, and information on special accommodations for English learners were analyzed to learn more about this population of students.

The 2005 evaluation report also included analyses of results for students receiving special education services. Data from the California Special Education Management Information System (CASEMIS) on student characteristics and services received was merged with CAHSEE results and analyzed to learn more about this population of students. This process was repeated with updated information from CASEMIS being combined with 2005–06 CAHSEE results.

Many students are still classified as English learners after as many as 10 years of education in this country.

Approximately 79,000 tenth grade students had previously been English learners but were now reclassified as fluent in English. Students who had been reclassified passed both the ELA and mathematics tests at higher rates than students in general (78% passed both tests compared to 65% of all 10th grade students). Former English learners who were recently (in the past 3 years) reclassified as proficient in English had lower passing rates compared to students who had been reclassified as proficient for 4 or more years.

Approximately 90,000 10th grade students remained classified as English learners. Supplemental analyses of data on English learners revealed that many students have been classified as English learners for a long time, without reaching

proficiency in English. More than half of the 10th graders still classified as English learners have been registered in U.S. schools for 10 years or more. In comparison to more recent enrollees, English learners who have been in U.S. schools longer (more than 7 years) were more likely to be economically disadvantaged, more likely to be in special education programs, and more likely to be classified as having a specific learning disability. Recent enrollees had more difficulty with the ELA test than with the mathematics test.

The population of students receiving special education services is quite diverse.

Our analysis of 2006 CAHSEE results for students with disabilities again revealed a strong relationship between the types of special education services a student receives and success on the CAHSEE. More than one third of the students analyzed received non-intensive services such as in-class accommodations or a resource specialist and were able to spend more than 80 percent of their time in regular instruction (Tables 3.14 and 3.15). About half of the students who participated in regular instruction passed the CAHSEE while still in 10th grade. Students in this category who had not passed in the 10th grade showed significant gains when they retested in the 11th and 12th grades (Tables 3.18 and 3.19). It seems likely that with continued assistance these students will have a good chance of meeting the CAHSEE requirement. It is thus reasonable to ask that both the schools and these students themselves continue to work to meet the required standards.

About one quarter of the students receiving special education services required intensive assistance. These students participated in regular instruction less than 20 percent of the time and only about 10 percent of them passed the CAHSEE during the 10th grade. Those who retested in the 11th and 12th grades showed only small gains in CAHSEE scores compared to other students.

Curriculum and Instruction

In 2000, we identified a representative sample of about 100 California public high schools and asked them to participate in a survey that included responses from principals and from ELA and mathematics teachers. We have continued to survey this same sample of schools in the spring of each year, except for 2003 and 2005 when we conducted a larger study of instruction, with a few replacements as needed. Results from the 2006 survey, including both responses to some new questions and trend information for continuing questions, as reported in detail in Chapter 4, provide information of the impact of CAHSEE on curriculum and instruction. Responses to some of the student questionnaire items provide additional information on how their curriculum relates to the CAHSEE.

Most examinees reported that topics on the CAHSEE were covered in courses that they took.

Overall, only 7 percent of all 10th graders and 16 percent of 11th and 12th graders still trying to pass the CAHSEE ELA test said that many topics on that test were not covered in their courses (Table 2.48). Similarly about 9 percent of all 10th graders and 16 to 17 percent of 11th and 12th graders still trying to pass the mathematics test said that many of the topics on that test were not covered in their courses. For 12th graders who reported that topics were not covered, 29 percent had not taken Algebra I, a course required for graduation, and 23 percent more reported taking Algebra I in the 12th grade and so had not yet completed the course (Table 2.19).

Principals indicated that CAHSEE has had a positive influence on instruction and they are implementing new ways to identify students that need additional help.

The percentage of principals reporting having implemented plans to assist students who may have difficulty passing the CAHSEE increased sharply in several areas. In 2006, 46 percent of the principals reported having fully implemented plans to increase remedial courses and another 37 percent reported having partially implemented such plans (Table 4.15). The 83 percent who said they fully or partially implemented remedial courses compares to only 58 percent who responded this way in 2004 and only 43 percent in 2002. Similarly, the percentage of principals who reported fully or partially implementing plans to increase summer school offerings rose from 31 percent in 2004 to 67 percent in 2006 and the reported number implementing plans to provide tutoring rose from 40 percent in 2004 to 96 percent in 2006. The percentage of principals who reported that they have plans to ensure all high school students receive instruction in each of the content standards also increased from 53 percent in 2004 to 71 percent in 2006 (Table 4.16).

Teachers found the CAHSEE Teacher Guide to be useful, but many indicated they were unfamiliar with the California Department of Education (CDE) Web site.

Approximately 65 percent of the teachers responding to our survey (68% of the ELA teachers and 63% of the mathematics teachers) indicated that the CAHSEE Teacher Guide was very or somewhat useful (Table 3.9). About 20 percent said they were unfamiliar with the Teacher Guide and only 1 percent reported that the Teacher Guide was not at all useful. By contrast, only 45 percent of the ELA teachers and 52 percent of the mathematics teachers found the CDE Web site to be very or somewhat useful, whereas 41 percent of the ELA teachers and 31 percent of the mathematics teachers said that they were not familiar with the site.

Trends in Educational Achievement and Persistence During the CAHSEE Era

Observed trends in important student outcomes over the past several years may reflect, in part, the far-reaching effects of the CAHSEE requirement for standards-based education and accountability. Since outcome information was not yet available at the

time of this report for students in the Class of 2006 who were subject to the CAHSEE requirement, most of the results summarized in Chapter 5 provide baseline trend information that will be augmented as the CAHSEE requirement takes hold.

Dropout rates from 10th through 12th grade have declined in the years since the CAHSEE requirement was established.

The CAHSEE requirement was enacted in 1999. Enrollment declines from 10th to 11th grade dropped sharply beginning in 2002 with the Class of 2004 and continued to decline this year for the Class of 2007 (Table 5.3). Enrollment declines from 11th to 12th grade dropped even more dramatically beginning in 2002 with the Class of 2003 (from 10.6 to 8.1%) and have been below 8 percent for subsequent classes (Table 5.4). There was, however, a modest increase in the 12th grade enrollment decline this year for the Class of 2006 (from 7.2% back up to 7.8%). While small in comparison to the earlier decrease, it may be significant because the Class of 2006 is the first group required to pass the CAHSEE.

California also reports 4-year high school dropout rates. The method for computing these rates changed significantly in 2003, so it is difficult to make comparisons between current rates and rates prior to 2003. Both the 1-year and 4-year dropout rates reported by the U.S. Department of Education and the California Department of Education declined slightly in 2005, the most recent year for which data were available. Note, however, that recent research has shown these 4-year dropout rates may be unrealistically high because 9th grade enrollments are inflated by students who repeat 9th grade (Warren, 2005). An alternative figure is obtained by using prior-year 8th grade enrollment to estimate the number of *first-time* 9th graders in a given year and then using this as the base for calculating 4-year dropout rates. At the same time, dropout rates may be unrealistically low because of the exclusion of students entering GED programs and students whose school status is uncertain.

Participation in Advanced Placement programs and scores on college placement tests both increased in 2005.

The proportion of 11th and 12th graders taking Advanced Placement courses and scoring 3 or better on the Advanced Placement Tests has increased steadily from about 14 percent during the 1999–2000 school year to 21 percent in the 2004–2005 school year, the most recent year for which data are available.

Recommendations

As in past years, we offer several general recommendations based on observations and findings from our evaluation activities. These recommendations are targeted to the Board and the legislature as they consider additions or modifications to policies concerning the CAHSEE and its use. We also offer several more technical recommendations for the continued improvement of the CAHSEE. These latter recommendations are targeted to CDE and to the test developers.

Key Policy Recommendations

General Recommendation 1: CDE worked to publicize options for students who do not complete the CAHSEE requirement in time to graduate with their class. Now data are needed on how many students take advantage of the various programs and on the effectiveness of each program in helping students to learn essential skills and earn their diploma.

Little statewide information is available on the number of students who did not graduate in June 2006 solely because of the CAHSEE requirement, on how many of these students are still trying to meet the CAHSEE requirement, and on what they are doing to help them meet the requirement. A number of students from the Class of 2006 who did not pass by June did participate in the July CAHSEE administration. Most were shown as still being 12th graders in the same schools they had been in the year before. Some were identified as now being in an Adult Education program. To date, no information is available on students who might continue to pursue a diploma through a community college program or on how many may be attempting to obtain a GED rather than a regular diploma.

Information on how many students are still working to earn a high school diploma and on the programs they are using to do so is needed in order to make policy decisions about how best to encourage and support students in these pursuits and how to encourage other students to continue to try to earn the diploma rather than giving up on their education.

General Recommendation 2: In addition to continued efforts to help seniors who have not yet passed the CAHSEE, work is needed to improve programs for juniors who did not pass in the 10th grade and, even more importantly, to improve programs to prepare students to be ready to pass on their first try as 10th graders.

Given the intense attention necessarily paid to last year's 12th graders, who were in the first class to face the CAHSEE requirements, the absence of improvement in passing rates for 10th and 11th graders may not be surprising. The long-term solution to helping all students meet the CAHSEE requirement must involve preparing more of them to pass in the 10th grade and improving immediate remediation efforts for those students who do not do so. CDE might work with districts to set goals for increasing the passing rates of 10th and 11th graders and to identify strategies for meeting these goals.

For mathematics, results presented in Chapter 2 suggest that preparing students to take Algebra I in 8th or 9th grade, rather than deferring this requirement to later grades could improve 10th grade passing rates. The data also suggest that encouraging students to take one or more mathematics courses beyond Algebra I would further improve the likelihood that they would meet the mathematics requirement in the 10th grade.

Another approach that many schools are implementing is to improve systems to achieve earlier diagnosis of student deficiencies in skills tested by the CAHSEE. Providing students who need additional help with remedial services before taking the exam for the first time is an obvious way to improve initial passing rates. High schools might improve coordination with middle schools to use assessment and other diagnostic information collected by the middle schools to identify individual student needs as they enter high school. Coordination with and feedback to middle schools is needed to ensure that all students develop foundational skills and are prepared to benefit fully from the high school curriculum.

General Recommendation 3: Research is needed on why many students remain classified as English learners for long periods of time. CDE should gather lessons from districts and schools that have been more successful in helping students achieve proficiency in English and make this information available to those with lower rates of success.

Initial CAHSEE passing rates for English learners are closely linked to efforts to help these students achieve proficiency in English. Improvements to California's English language development (ELD) programs have allowed many students to attain proficiency within one or two years of entering the U.S. educational system. Many English learners, however, have not been able to reach English proficiency even after many years (e.g., 10 or more for 10th graders). While there has been research on the effectiveness of ELD programs, more research is needed to identify programs that are particularly effective for students with various barriers to English proficiency.

General Recommendation 4: Districts and the state should provide support and guidance to IEP teams in making key decisions about whether students in special education programs can meaningfully participate in the regular curriculum. Students who can participate in the regular high school curriculum should be held to the same high expectations as the rest of their classmates. At the same time, districts and the state should identify alternative goals and ways of recognizing the accomplishment of these goals for students who are not able to participate meaningfully in the regular curriculum.

As part of a settlement agreement in the Chapman case, legislation was passed exempting Class of 2006 students in special education programs from the requirement to meet the CAHSEE requirement. Additional legislation (SB 267) has just been enacted to extend this exemption to special education students in the Class of 2007. Analyses reported in Chapter 3 indicate that the population of students participating in special education programs is quite diverse. Extending a blanket exemption to all of them may not be the most effective approach to ensuring that all students reach their full potential. Instead, California may wish to consider exemptions and alternatives for special education students that are targeted to the curriculum they receive.

General Recommendation 5: Research is needed on factors that lead to lower CAHSEE passing rates in schools with higher concentrations of at-risk students. Programs in schools with high concentrations of at-risk students who are successful in passing the CAHSEE should be identified and information about these programs should be disseminated widely.

Differences in passing rates for minority and disadvantaged students in schools with high and low concentrations of similar students are striking. We cannot tell from the available data whether the different passing rates result from differences in program effectiveness or more simply from differences in the nature and needs of the students served. We do know, however, that the low passing rates in schools with high concentrations of at-risk students are not acceptable. More systematic study of differences between high-concentration schools with high passing rates versus those with low passing rates is needed to support the development, dissemination, and implementation of programs to increase success on the CAHSEE for schools serving high proportions of at-risk students.

General Recommendation 6: Data on success in college and other endeavors for students who pass the CAHSEE will be needed soon to determine whether the CAHSEE requirements are sufficiently rigorous.

When the CAHSEE content and passing standards were first established, the State Board of Education signaled its intention to increase the rigor of these standards over time, as the effectiveness of instruction increased. ACHIEVE and other groups reviewing high school graduation requirements have argued for considerably more rigorous requirements. For example, ACHIEVE argues that all students should be required to take not just Algebra I, but also Geometry and Algebra II, in order to be prepared for a challenging college curriculum. Other research has shown that students who come to college unprepared and thus begin by taking remedial, non-credit-bearing courses, have significantly lower chances of completing college.

Many students from the Class of 2006, the first cohort of students subject to the CAHSEE requirement, have now entered college. Collecting data on their success in getting into college and the proportion required to take remedial courses once they got there will provide important information for policy-makers who must decide whether and how much to increase the rigor of the CAHSEE requirement for future high school classes.

More Specific Technical Recommendations

Specific Recommendation 1: CDE and ETS should seek ways to improve scoring consistency for the CAHSEE essays during high volume administrations.

The rate of exact agreement between independent scorers of each student's essay has generally been near 70 percent and the frequency of disagreements by more than one score point has been below 0.5 percent. In both 2005 and 2006, exact agreement rates for the 10th grade essays in the high volume administrations (February and March) has been 66 or 67 percent and the frequency rate of disagreements by more than one score point has been above 0.5 percent. While variability in the essay scores is only a minor factor in the reliability of the overall scores, it would still be prudent to work to continue to improve scoring consistency. CDE may wish to set explicit targets for scoring consistency, such as 70 percent exact agreement and less than 0.5 percent serious disagreements, and then monitor ongoing progress in meeting these more rigorous targets.

Specific Recommendation 2: The CAHSEE Web site includes a wealth of useful information about the CAHSEE that teachers should find useful. CDE should consider ways to increase teacher familiarity with and use of the CAHSEE Web site.

Between 30 and 40 percent of the teachers responding to our survey said that they are not familiar with the CAHSEE Web site. CDE might consider ways of increasing information about the Web site. In addition, CDE might conduct focus groups to suggest ways to make the Web site even more useful to teachers.

Independent Evaluation of the California High School Exit Examination (CAHSEE): 2006 Evaluation Report

Table of Contents

	Page
Executive Summary	i
Chapter 1: Introduction.....	1
The California High School Exit Examination.....	1
Prior Evaluation Activities and Outcomes	2
Summary of Year 1 Evaluation Activities (June 2000)	2
District Baseline Survey Resulting from Year 1 Activities (December 2000)	3
Summary of Year 2 Evaluation Activities (June 2001)	4
Summary of Year 3 Evaluation Activities (June 2002)	6
Summary of Year 4 Evaluation Activities (September 2003)	8
Summary of Year 5 Evaluation Activities (September 2004)	11
Summary of Year 6 Evaluation Activities (September 2005)	12
Organization and Contents of 2006 Evaluation Report	14
Chapter 2: Results from the 2005–2006 Administrations	17
Introduction	17
Analysis of the Test Score Data.....	19
Matching Student Records from Different Administrations	22
Computing Passing Rates	23
Equating the 2005 Test Forms	24
Scoring Consistency	27
Test Results	30
Class of 2006 – Seniors Struggle to Meet Graduation Deadline.....	30
Class of 2007 – Improvement for Students Who Retested	37
Class of 2008 — Initial Passing Rates for 10 th Graders.....	39
Analysis of Results by Mathematics Courses Taken	45
School-Level Effects	47
Difference in School-Level Passing Rates.....	47
Statistical Analysis of School and District Effects	50
Student Questionnaire Responses	60
Results	63
Summary of Test Results.....	68

Table of Contents (Continued)

	Page
Chapter 3: A Closer Look at Specific Populations	69
Introduction	69
Results for English Learners	70
EL Enrollment Date	70
Home Language	73
English Language Development Program	75
Other Programs	76
EL Accommodations	76
Comparison of Recent versus Earlier Enrollees	77
Results for Reclassified Fluent English Proficient Students	78
Reclassification Date	78
Home Language	80
English Language Development Program	83
Other Programs	83
EL Accommodations	84
Results for Students in Special Education Programs	84
Supplemental Data on Students Receiving Special Education Services	85
Passing Rates for Students Receiving Different Special Education Services	86
Results for Students Receiving Special Education Services Who Retested in 11 th and 12 th Grade	90
Accommodations and Modifications	93
Summary of Findings	99
Chapter 4: Principal and Teacher Survey Responses	101
Introduction	101
Survey Development	101
Sampling and Administration	102
Principal and Teacher Findings	103
Overview	104
Background	105
Effect of the CAHSEE	109
Use of the CAHSEE Results	119
State Content Standards	124
Expectations	128
Awareness	140
Other	141
Summary	144

Table of Contents (Continued)

	Page
Chapter 5: Trends in Educational Achievement and Persistence During the CAHSEE Era	149
Introduction	149
Students Who Leave High School Prematurely	149
Dropout Rates	149
Enrollment Trends	154
GED Examinees	158
CHSPE Examinees	160
Graduation Rates	165
College Preparation (SAT/ACT/UC & CSU courses)	166
College Entrance Examination Participation and Performance	166
College Preparatory Coursework	170
AP Test Achievement	171
College/University Enrollment	173
Summary Findings	175
Chapter 6: Key Findings and Recommendations	177
Introduction	177
Key Findings	177
CAHSEE Test Results	177
Results for Specific Populations	178
Curriculum and Instruction	180
Other Outcome Indicators	181
Recommendations	182
Key Policy Recommendations	182
More Specific Technical Recommendations	185
References	187
Appendix A: Principal Survey Items and Responses	A-1
Appendix B: Teacher Survey Items and Responses	B-1
Appendix C: Student Questionnaire Responses	C-1

Table of Contents (Continued)

List of Tables

	Page
Table 2.1. Number of CAHSEE 2005–06 ELA Answer Documents and Percent Passing by Administration Type and Date.....	20
Table 2.2. Number of CAHSEE 2005–06 Mathematics Answer Documents and Percent Passing by Administration Type and Date.....	21
Table 2.3. Number of 2005–06 Answer Documents and Number of Students after Matching.....	23
Table 2.4. Number of Students Matched to Prior-Year Records by Current and Prior Grade.....	23
Table 2.5. Tenth Grade Enrollment Estimates from DataQuest, STAR, and CAHSEE.....	24
Table 2.6. Raw-to-Scale Score Conversions for the 2005–06 ELA Tests	25
Table 2.7. Raw-to-Scale Score Conversions for the 2005–06 Mathematics Tests.....	26
Table 2.8. Scoring Consistency for Student Essays.....	28
Table 2.9. Percent of 10 th Grade Essays Assigned Each Score Level by Each Rater in the March 2006 Administration	29
Table 2.10. Percent of 11 th Grade Essays Assigned Each Score Level by Each Rater in the March 2006 School Administration	29
Table 2.11. Percent of 12 th Grade Essays Assigned Each Score Level by Each Rater in the March 2006 Administration	29
Table 2.12. Estimated Number and Percent of Students in the Class of 2006 Passing Both CAHSEE Tests through May 2006	31
Table 2.13. Estimated Number and Percent of Students in the Class of 2006 Passing the CAHSEE ELA Test through May 2006.....	32
Table 2.14. Estimated Number and Percent of Students in the Class of 2006 Passing the CAHSEE Mathematics Test through May 2006	32
Table 2.15. Distribution of 12 th Graders and Percent Passing Mathematics by Highest Mathematics Course Taken.....	33
Table 2.16. Distribution of 12 th Graders and Percent Passing Mathematics by When Algebra I was Taken	34
Table 2.17. Percentage of Seniors Taking Algebra I and Mathematics Courses Beyond Algebra I by Demographic Group.	35
Table 2.18. Distribution of 12 th Graders and Percent Passing Mathematics by Responses to Mathematics Questionnaire Items	35
Table 2.19. Mathematics Courses Taken by Responses to Mathematics Questionnaire Items	36

Table of Contents (Continued)

	Page
Table 2.20. Estimated Number and Percent of Students in the Class of 2007 Passing the CAHSEE ELA Test through 11 th Grade	37
Table 2.21. Estimated Number and Percent of Students in the Class of 2007 Passing the CAHSEE Mathematics Test through 11 th Grade.....	38
Table 2.22. Estimated Number and Percent of Students in the Class of 2007 Passing Both CAHSEE Tests through 11 th Grade.....	38
Table 2.23. Estimated Passing Rates for Classes of 2006 and 2007 After 11 th Grade	39
Table 2.24. Percent of 10 th Grade Students Passing Both Parts of the CAHSEE by Demographic Group.	40
Table 2.25. Initial 10 th Grade Passing Rates by Demographic Group—English- Language Arts	41
Table 2.26. Initial 10 th Grade Passing Rates by Demographic Group— Mathematics	42
Table 2.27. Initial 10 th Grade Passing Rates by Student Category and Race/Ethnicity.....	44
Table 2.28. Distribution of Students by Highest Math Course Taken	45
Table 2.29. Trends in Math Courses Taken by Demographic Group	46
Table 2.30. Initial Mathematics Passing Rates by Class and Highest Math Course Taken	47
Table 2.31. 2006 10 th Grade ELA Passing Rates for Schools with Different Concentrations of Minority or At-Risk Students	48
Table 2.32. 2006 10 th Grade Mathematics Passing Rates for Schools with Different Concentrations of Minority or At-Risk Students.....	49
Table 2.33. 2006 10 th Grade Passing Rates for Low-Performing Schools	50
Table 2.34. Descriptive Statistics for Student Scores in 2004, 2005, and 2006 and 2004–2005 Score Gains and 2005–2006 Score Gains on the CAHSEE ELA Test by Student-Level Variables	52
Table 2.35. Descriptive Statistics for Student 2004 Score, 2005 Score, 2006 Score and 2004–2005 Gain Scores, 2005–2006 Score Gains on the CAHSEE Math Test by Student-Level	53
Table 2.36. Description of Student-Level Variables	54
Table 2.37. Description of School-Level Variables	55
Table 2.38. Frequencies of Categorical School-Level Variables	56
Table 2.39. Descriptive Statistics of Continuous School-Level Variables.....	57
Table 2.40. Descriptive Statistics of District-Level Finance Variables for Score Gain HLM Analyses (Unit: Dollars-per-Student [ADA]).....	57
Table 2.41 Variation in 12 th Grade Student Gain Scores at the Student, School Levels	58
Table 2.42. HLM Parameter Estimates: CAHSEE ELA.....	59

Table of Contents (Continued)

	Page
Table 2.43. HLM Parameter Estimates: CAHSEE MATH.....	59
Table 2.44. Number of Test Takers in the 2005 and 2006 10 th Grade Cohorts.....	61
Table 2.45. Numbers of Test Takers in the 2005 and 2006 11 th Grade Cohorts	62
Table 2.46. Numbers of Test Takers in Matched 2005 and 2006 Samples.....	62
Table 2.47. Student-Reported Factors That Might Prevent Them From Graduating.....	63
Table 2.48. Self-Reported Exposure to Topics on the Tests	65
Table 2.49. Students' Reasons That Topics Were Difficult on the Tests.....	66
Table 2.50. Strategies Reported to Meet the CAHSEE Requirements.....	67
 Table 3.1. Number of 10 th Grade Answer Documents and CAHSEE Passing Rates by Grade and Language Fluency	70
Table 3.2. Number of 10 th Grade Students and CAHSEE Passing Rates by Year of EL Enrollment.....	71
Table 3.3. Number of 10 th Grade EL Students and CAHSEE Passing Rates by Primary Language	73
Table 3.4. Number of 10 th Grade EL Students and CAHSEE Passing Rates by Type of EL Program	75
Table 3.5. Number of 10 th Grade EL Students and CAHSEE Passing Rates by Type of Program.....	76
Table 3.6. Number of 10 th Grade EL Students and CAHSEE Passing Rates Receiving EL Accommodations	77
Table 3.7. Characteristics of Students with Recent and Earlier EL Enrollment Dates.	78
Table 3.8. Number of RFEP Students and CAHSEE Passing Rates by Year of Reclassification.....	79
Table 3.9. Number of 10 th Grade RFEP Students and CAHSEE Passing Rates by Home Language	81
Table 3.10. Number of 10 th Grade RFEP Students and CAHSEE Passing Rates by Type of EL Program.....	83
Table 3.11. Number of 10 th Grade RFEP Students and CAHSEE Passing Rates by Type of Program	83
Table 3.12. Number of 10 th Grade RFEP Students and CAHSEE Passing Rates Receiving EL Accommodations	84
Table 3.13. Number of Students in the Matched CAHSEE-CASEMIS Files by Grade on Each File.....	86
Table 3.14. Number of 10 th Grade Students and Percent Passing by Time Away from Regular Instruction (2005 and 2006 Students with CASEMIS Data).....	87

Table of Contents (Continued)

	Page
Table 3.15. Number of Students and Percent Passing by Type of Service Received (Matched 2006 10 th Grade Students)	88
Table 3.16. Percent of Time Outside Regular Instruction by Type of Service Received (Matched 2005 10 th Grade Students)	89
Table 3.17. Primary Disability Codes for 10 th Grade Students Receiving Special Education Services with CAHSEE Success Information	90
Table 3.18. Number of Students, Average Prior Year Scores, and Average Score Gain by Time Away from Regular Instruction (2005 11 th Grade and 2006 11 th and 12 th Grade Students)	91
Table 3.19. Number of Students, Average Prior Year ELA Score, and Average ELA Score Gain by Type of Service Received (2005 11 th Grade and 2006 11 th and 12 th Grade Students)	92
Table 3.20. Number of Students, Average Prior Year Mathematics Score, and Average Mathematics Score Gain by Type of Service Received (2005 11 th Grade and 2006 11 th and 12 th Grade Students)	93
Table 3.21. Frequency of Accommodations and Modifications and Percent Scoring 350 or More: ELA	94
Table 3.22. Frequency of Accommodations and Modifications and Percent Scoring 350 or More: Math	95
Table 3.23. Number of Matched 10 th Grade Special Education Students and Percent Meeting the CAHSEE Requirement by Class Participation and Testing Condition.....	96
Table 3.24. Number of Matched 10 th Grade Special Education Students and Percent Meeting the CAHSEE ELA Requirement by Type of Service and Testing Condition.....	97
Table 3.25. Number of Matched 10 th Grade Special Education Students and Percent Meeting the CAHSEE Math Requirement by Type of Service and Testing Condition.....	98
Table 4.1. Longitudinal Survey Response Rates	104
Table 4.2. Principals' Responses to Estimated Percentage of Students Participating in Specialty Education Programs (N=51)	106
Table 4.3. Percentage of Principals Reporting Post-Graduation Plans for Seniors in Their Schools (N=51).....	107
Table 4.4. Percentage of Teachers Estimating Their Students' English Fluency (N=202)	108
Table 4.5. Percentage of Surveyed Teachers That Teach at Each Grade Level (N=202)	108

Table of Contents (Continued)

	Page
Table 4.6. Percentage of Teachers Estimating Time Their Students Spend Each Week on Assignments Outside the Classroom for Their Class (N=202).....	109
Table 4.7. Percentage of Teachers Estimating Various Amounts of Time on CAHSEE Activities.....	110
Table 4.8. Percentage of Teachers Estimating Various Amounts of Time in Professional Development, In-Service, or Seminars in Primary Subject Area (N=202)	111
Table 4.9. Percentage of Teachers Rating Quality of Professional Development Experiences.....	111
Table 4.10. ELA and Math Teacher Ratings of Instructional Benefit Garnered from Professional Development Over Four Years (in percentages)	111
Table 4.11. ELA and Math Teacher Ratings of Usefulness of CAHSEE Resources (in percentages) (Teacher N=202)	112
Table 4.12. Percentage of Principals Undertaking Activities to Prepare Faculty/Staff for the CAHSEE Administration	113
Table 4.13. Principal and Teacher Ratings of Influence of the CAHSEE on Instructional Practices (in percentages) (Principal N=51; Teacher N=202) ...	116
Table 4.14. Extent to Which Services Have Been Implemented to Promote Learning for All Students and Related Financial Constraints, According to Principals (in percentages) (N=51)	117
Table 4.15. Percentage of Principals Indicating Actions to Promote Student Learning ...	118
Table 4.16. Extent to Which the CAHSEE Draws Resources Away from Various Categories of Courses, According to Principals (in percentages) (N=51)	119
Table 4.17. Percentage of Principals Indicating Plans for Activities to Assist High School Students Who Do Not Pass the Exit Exam or Who Do Not Seem Prepared to Take It	120
Table 4.18. Principals' Reported Percentages of Preparations for Alignment with California Content Standards	125
Table 4.19. Percentage of Principals Reporting Similarity between District and State Standards.....	125
Table 4.20a. Percentage of Teachers Indicating Coverage of ELA Standards by Curriculum	126
Table 4.20b. Percentage of Teachers Indicating Coverage of Mathematics Standards by Curriculum	126
Table 4.21. Percentage of Principals Indicating the Percentage of Teachers Who Have/Use the California Standards Test (CST)/CAHSEE Blueprints (N=51)	128
Table 4.22. Percentage of Principals Who Gather Evidence That ELA and Math Teachers Are Teaching to the Standards (N=51)	128

Table of Contents (Continued)

	Page
Table 4.23. Teachers' Ratings of Preparedness of Students in the 10 th Grade (in percentages)	129
Table 4.24. Principals' Predicted Impact of the CAHSEE on Student Motivation and Parental Involvement (in percentages)	130
Table 4.25. Teachers' Predicted Impact of the CAHSEE on Student Motivation and Parental Involvement (in percentages)	132
Table 4.26. Principals' and Teachers' Predicted Impact of the CAHSEE on Student Retention and Dropout Rates.....	135
Table 4.27. Principals' 2001 through 2006 Estimates of the Percentage of Students with Instruction in Content Standards (in percentages)	139
Table 4.28. Principals Reporting Reason Seniors in Their Schools Unlikely to Graduate (in percentages) (N=51).....	140
Table 4.29. Principals' Responses to Estimated Percentage of Students and Parents Familiar with the CAHSEE	141
Table 4.30. Percentage of Principals Indicating Factors Affecting Student Success on the CAHSEE	142
Table 4.31. Responsibility Felt by Teachers Other Than ELA and Math (percentages as perceived by principals and ELA and math teachers)	142
Table 5.1. CDE Four-Year Dropout Rates by Race/Ethnicity	153
Table 5.2. Enrollment Declines From 9th to 10th Grade by High School Class.	155
Table 5.3. Enrollment Declines From 10th Grade to 11th Grade	156
Table 5.4. Enrollment Declines From 11th Grade to 12th Grade	157
Table 5.5. A–G Course Completions as a Percentage of Freshmen Four Years Earlier, by Race/Ethnicity and Gender.....	171
Table 5.6. California Postsecondary Education Commission (CPEC) Counts of High School Graduates and First-Time Freshmen Enrollments	174

List of Figures

Figure 2.1. Mathematics passing rates for 12th graders by grade when Algebra I was taken.	34
Figure 2.2. Trends in 10th grade CAHSEE passing rates	43
Figure 2.3. Trends in overall passing rates for selected groups	43

Table of Contents (Continued)

	Page
Figure 3.1. Number of 10th Grade EL students by year of enrollment	71
Figure 3.2. CAHSEE passing rates for 10th Grade EL students by year of enrollment	72
Figure 3.3. Number of 10th Grade EL students by home language	73
Figure 3.4. ELA passing rates for 10th grade EL students by home language.....	74
Figure 3.5. Math passing rates for 10th grade EL students by home language	74
Figure 3.6. Number of 10th grade RFEP students by year of reclassification	79
Figure 3.7. CAHSEE passing rates for 10th grade RFEP students by year of reclassification	80
Figure 3.8. Number of 10th Grade RFEP students by home language	81
Figure 3.9. ELA passing rates for 10th Grade RFEP students by home language.....	82
Figure 3.10. Math passing rates for 10th Grade RFEP students by home language.....	82
 Figure 4.1a. Percentage of principals reporting activities undertaken in preparation for the spring 2001, 2002, 2003, 2004, and 2006 administrations of the CAHSEE.....	114
Figure 4.1b. Percentage of teachers reporting activities undertaken in preparation for the spring 2001, 2002, 2003, 2004, and 2006 administrations of the CAHSEE.....	115
Figure 4.2. Percentage of principals in 2006 reporting plans for remediation of students who do not pass the CAHSEE (N=51).	122
Figure 4.3. Percentage of principals indicating the percentage of teachers who understand the difference between “teaching to the test” and “aligning the curriculum and instruction to the standards” in 2001, 2002, 2003, 2004, and 2006.....	127
Figure 4.4a. Percentage of principals predicting increased or strongly increased student motivation and parental involvement in 2000, 2001, 2002, 2003, 2004, and 2006.....	131
Figure 4.4b. Percentage of teachers predicting increased or strongly increased student motivation and parental involvement in 2000, 2001, 2002, 2003, 2004, and 2006.....	133
Figure 4.5a. Percentage of principals predicting increased or strongly increased student retention and dropout rates in 2000, 2001, 2002, 2003, 2004, and 2006.	136
Figure 4.5b. Percentage of teachers predicting increased or strongly increased student retention and dropout rates in 2000, 2001, 2002, 2003, 2004, and 2006.	136
Figure 4.6a. Percentage of principals estimating the percentage of students who have had instruction in ELA content standards (ordered by least instruction).....	137

Table of Contents (Continued)

	Page
Figure 4.6b. Percentage of principals estimating the percentage of students who have had instruction in mathematics content standards (ordered by least instruction).	138
Figure 5.1. CDE explanation of dropout definition prior to October 2003.	150
Figure 5.2. CDE explanation of dropout definition as of October 2003.	151
Figure 5.3. Single-year dropout rates according to CDE.	152
Figure 5.4. Four-year dropout rates by race/ethnicity.	154
Figure 5.5. Enrollment declines from 9th to 10th grade by high school class.	156
Figure 5.6. Enrollment declines from 10th to 11th grade by high school class.	157
Figure 5.7. Enrollment declines from 11th to 12th grade by high school class.	158
Figure 5.8. First-time GED examinees, by year and race/ethnicity.	159
Figure 5.9. First-time GED examinees in months January through July, by year and race/ethnicity.	160
Figure 5.10. First-time CHSPE examinees across three years for the spring, summer, and fall administrations.	162
Figure 5.11. CHSPE participation rates in chronological order for all examinees, by year, administration date, and race/ethnicity.	163
Figure 5.12. CHSPE participation rates in grouped by administration window for all examinees, by year and race/ethnicity.	164
Figure 5.13. Graduation rates.	165
Figure 5.14. SAT and ACT participation rates and success rates over time.	167
Figure 5.15. SAT participation rates over time, by gender and race/ethnicity.	168
Figure 5.16. ACT participation rates over time, by gender and race/ethnicity.	168
Figure 5.17. SAT mean math and verbal scores over time.	169
Figure 5.18. ACT mean scores over time.	169
Figure 5.19. A–G course completion over time.	170
Figure 5.20. AP participation rates over time.	172
Figure 5.21. AP pass rates over time (i.e., number of AP exam scores ≥ 3 as a percentage of student enrollment).	173
Figure 5.22. Percentage of California public and private high school graduates enrolling as first time freshmen in California colleges and universities	174

Chapter 1: Introduction

The California High School Exit Examination

The California legislation that established the requirement that students pass a graduation exam in English-language arts (ELA) and mathematics beginning with the Class of 2004 (established by Senate Bill (SB) 2X, passed in 1999 and written into the California Education Code as Chapter 9, Sections 60850–60856) was further modified in 2002 through the passage of Assembly Bill (AB) 1609. The revised legislation gave the State Board of Education (the Board) authority to postpone the California High School Exit Examination (CAHSEE) requirement, based in part on the results of a study of the extent to which both test development and standards-based instruction met standards for this type of examination (Wise et al., 2003a). In July 2003, after the completion of the 2002–03 CAHSEE testing, the Board voted to defer the CAHSEE requirement until 2006.

The original legislation mandating the requirements for the graduation exam also specified an independent evaluation of the CAHSEE. The original contract period operated from 1999 through 2004; an additional contract was awarded to continue the evaluation through 2007. The California Department of Education (CDE) awarded both contracts for the evaluation to the Human Resources Research Organization (HumRRO). HumRRO's efforts have focused on analyses of data from tryouts of test questions and from the annual administrations of the CAHSEE, and have reported on trends in pupil performance and retention and graduation, dropout, and college attendance rates. The legislation also specified that evaluation reporting would include recommendations for improving the quality, fairness, validity, and reliability of the examination. The legislation required an initial evaluation report in June 2000 and biennial reports to the Governor, the Legislature, the Board, and the CDE in February 2002 and February 2004.

In addition to the legislatively mandated evaluation reports, the contracts for the evaluation required an annual report of evaluation activities. The present report meets the contract requirement for a report of activities and findings during the seventh year of the evaluation (the second year of the evaluation continuation contract). This report adds to results and recommendations included in prior evaluation reports (Wise, Hoffman, & Harris, 2000; Wise, et al., 2000a; Wise, et al., 2001; Wise et al., 2002b; Wise et al., 2003; Wise et al., 2004a; Wise et al., 2004b; Wise et al., 2005). Findings and recommendations from the prior reports are summarized briefly in the next sections to provide a context for the continuing evaluation activities.

Prior Evaluation Activities and Outcomes

Summary of Year 1 Evaluation Activities (June 2000)

The Year 1 evaluation report reviewed and analyzed three types of information:

Test Developer Plans and Reports. No formal reports were available during the first year; thus, HumRRO attended meetings and listened to presentations by the development contractor, American Institutes for Research (AIR), and by the CDE. We also monitored various presentations to the High School Exit Examination (HSEE) Panel and to the Board, and had direct conversations with members of each of these groups.

Statewide Data Sources. An initial source of information for the evaluation was data from the CAHSEE pilot administration. HumRRO also examined 1999 Standardized Testing and Reporting (STAR; for details see <http://www.cde.ca.gov/ta/tg/sr/index.asp>) results with plans to monitor trends in STAR results over the course of the evaluation.

District and School Sample. HumRRO selected a representative sample of 24 districts and 84 of their high schools to establish a longitudinal group for study. The baseline surveys, which were administered to principals and English-language arts and mathematics teachers, provided an initial look at schools' perspectives of the impact of CAHSEE on their programs. We also recruited teachers and curriculum experts from these schools and their districts to review test items and tell us whether they covered knowledge and skills that not all students would be taught in their current curriculum.

The following summarizes the specific recommendations made at the end of the Year 1 evaluation activities:

Recommendation 1. The Legislature and Governor should give serious consideration to postponing full implementation of the CAHSEE requirement by 1 or 2 years.

Recommendation 2. The CDE should develop and seek comment on a more detailed timeline for CAHSEE implementation activities. This timeline should show responsibility for each required task and responsibility for oversight of the performance of each task. The plan should show key points at which decisions by the Board or others would be required along with separate paths for alternative decisions made at each of these points.

Recommendation 3. The CDE and the Board should work with districts to identify resource requirements associated with CAHSEE implementation. The Legislature must be ready to continue to fund activities to support the preparation of students to meet the ambitious challenges embodied in the CAHSEE.

Recommendation 4. The Board should adopt a clear statement of its intentions in setting CAHSEE content and performance standards. This statement should describe the extent to which these standards are targeted to ensure minimum achievement relative to current levels or to significantly advance overall expectations for student achievement.

Recommendation 5. The Board should exhibit moderation in selecting content standards and setting performance standards for the initial implementation of CAHSEE. Subsequently, standards should be expanded or increased based on evidence of improved instruction.

Recommendation 6. Members of the HSEE Panel and its Technical Advisory Committee should participate in developing recommendations for minimum performance standards.

Recommendation 7. The CDE should move swiftly to establish an independent Technical Issues Committee (TIC) to recommend approval or changes to the CAHSEE development contractor's plans for item screening, form assembly, form equating, scoring, and reporting.

Complete details of the Year 1 evaluation, including selection procedures for the longitudinal sample, are presented in a primary and a supplemental report describing evaluation activities, findings, and recommendations (Wise et al., June 2000a; Wise et al., August 2000b). These two evaluation reports emphasize both the positive aspects of the results, as indicated by several measures of the quality of the test questions, and the amount of work remaining to be done before operational administration of the CAHSEE. The primary apprehension noted in these reports was educators' concern that, at that time, students were not well prepared to pass the exam.

District Baseline Survey Resulting from Year 1 Activities (December 2000)

The results of the baseline survey of teachers and principals in the longitudinal sample of high schools indicated concern with the degree to which students were being provided sufficient opportunities to learn the material covered by the CAHSEE. After reviewing these concerns, the Board and the CDE requested an additional survey of all public high school and unified districts in California. The contract required that a CAHSEE District Baseline Survey be conducted prior to October 1, 2000. HumRRO developed and sent out the survey shortly after the Board adopted specifications for the CAHSEE. The survey covered plans for changes in curriculum and other programs to help students pass the examination. We asked that each district have the survey completed by an Assistant Superintendent or Director of Curriculum and Instruction, or the individual at the district level who was most knowledgeable about the CAHSEE.

The survey, which built on and benefited from the results of the longitudinal sample survey, addressed five critical topics:

1. *awareness* of the CAHSEE, its content, administration plans, and requirements for student participation;
2. *alignment* of the district's curriculum to statewide content standards, particularly those to be covered by the CAHSEE;
3. *plans and preparation* for increasing opportunities for all students to learn the material covered by the CAHSEE and to help students who do not initially pass the examination;
4. *expectations* for passing rates and for the effect of the CAHSEE on instruction and the status of specific programs offered in the district; and
5. *outcome baselines*, including retention and graduation rates and students' post-graduation plans.

The following general conclusions were drawn from results of the district survey:

- *General awareness* of the CAHSEE was high, but more information was needed, particularly for students and parents, about (a) the knowledge and skills covered by the CAHSEE and (b) plans for administration and reporting.
- *Districts reported high degrees of alignment* of their own content standards to the state content standards. The survey addressed this question at a general level; we concluded more work was needed to assess and document the degree to which each district's curriculum covered the content standards tested by the CAHSEE and the degree of student access to courses that offered such coverage.
- *Districts had implemented or planned a number of programs* to prepare students and teachers for the CAHSEE and to assist students who did not initially pass. The most frequently planned activities included more summer school, tutoring, and matching student needs to specific courses.
- *Districts believed the CAHSEE would have a positive impact* on curriculum and instruction. Most expected at least half of their students to pass the CAHSEE on their first attempt.
- *Outcome baselines* would be used in future years.

Complete details of the district-wide survey effort were presented in a final technical report describing evaluation activities, findings, and recommendations (Sipes, Harris, Wise, & Gribben, 2001).

Summary of Year 2 Evaluation Activities (June 2001)

The Year 2 evaluation reviewed and analyzed three types of information:

Developer Plans and Reports. HumRRO continued to monitor test development activities, ranging from observation of and presentations to the HSEE Panel to observation of the standard-setting workshops to develop recommendations for

minimum passing scores for each of the two portions of the CAHSEE test: mathematics and ELA. We reviewed and participated in numerous discussions concerning the equating of alternate forms, the score scale used, and the minimum passing levels.

Analysis of Field-Test and Operational CAHSEE Data. HumRRO analyzed results from a second field test of new CAHSEE questions, conducted in Fall 2000, and began analyses from the operational administrations of CAHSEE in March and May of 2001. Initial analyses of technical characteristics of the test form used in the March administration and the resulting passing rates were described in our Year 2 Evaluation Report (Wise et al., June 2001).

Longitudinal Surveys of District and School Sample Personnel. The representative sample of 24 districts and approximately 90 of their high schools required replacement of one district with three schools. The surveys, which were administered to principals and ELA and mathematics teachers, provided a continuing look at schools' perspectives of the impact of the CAHSEE on their programs. In addition, testing coordinators were surveyed to identify issues with the administration of the CAHSEE.

The following summarizes the two general and six specific recommendations made in HumRRO's report of the Year 2 evaluation activities.

Recommendation 1. Stay the course. The Legislature and Board should continue to require students in the Class of 2004 to pass the exam, but monitor schools' progress in helping most or all of their students to master the required standards.

Recommendation 2. The Legislature and Board should continue to consider options for English learners and students receiving special education services.

Recommendation 3. Provide more technical oversight for the continued development and administration of the CAHSEE.

Recommendation 4. For future classes, delay testing until the 10th grade.

Recommendation 5. Construct a practice test of released CAHSEE items for districts and schools to administer to 9th graders to identify students at risk of not passing the CAHSEE.

Recommendation 6. Monitor test administration more extensively and develop a system for identifying and resolving issues.

Recommendation 7. Develop and implement a more comprehensive statewide information system that will allow the CDE to monitor individual student progress.

Recommendation 8. The Superintendent, the Board, and the Legislature should specify in more detail the treatment of students in special circumstances (e.g., students receiving special education services and English learners) under CAHSEE requirements.

Complete details of the Year 2 effort were presented in the annual evaluation report and first biennial report describing evaluation activities, findings, and recommendations (Wise et al., June 2001; Wise et al., January 2002a). These two reports described results of the first administration of the CAHSEE to 9th graders in the Class of 2004. The reports also described preparation for and reactions to the CAHSEE as reported by principals and teachers. A key concern described in these reports was the relatively low passing rate for the mathematics portion of the exam, particularly for students receiving special education services and English learners.

Summary of Year 3 Evaluation Activities (June 2002)

The first biennial report of the CAHSEE evaluation was released in February 2002 (Wise et al., January 2002a). This report supplemented information on the 2002 administrations from the Year 2 report and included specific recommendations to the Legislature, the Governor, and the Board. These were:

General Recommendation 1. Stay the course. The Legislature and the Board should continue to require students in the Class of 2004 to pass the exam, but monitor schools' progress in helping most or all of their students to master the required standards.

General Recommendation 2. The Legislature and the Board should continue to consider options for students with disabilities and for English learners.

The first biennial report also included several more specific recommendations to:

- Provide more technical oversight.
- Delay testing of future classes until the 10th grade.
- Construct a practice test of released CAHSEE items for districts and schools to administer to 9th graders to identify students at risk of failing the CAHSEE.
- Monitor test administration more extensively and develop a system for identifying and resolving issues.
- Develop a more comprehensive information system that will allow the state to monitor individual student progress.
- Specify (the Superintendent, the Board, and Legislature working in concert) in more detail how students in special circumstances will be treated by the CAHSEE requirements.

Other Year 3 evaluation activities involved reviewing and analyzing four types of information:

Test Developer Plans and Reports. HumRRO continued to monitor test development activities and reports. These included changes to test administration procedures, equating alternate forms, and changes to reporting procedures.

Independent review of test questions. HumRRO assembled two panels of experts in curriculum and instruction, most of whom taught either ELA or mathematics. We asked them to review and analyze questions from recent CAHSEE administrations as well as questions from the (then) new test development contractor that had not yet been used operationally. Ratings indicated the extent to which the questions fairly and completely assessed targeted content standards. In addition, we asked the reviewers to note any specific issues with the quality of the questions or the response options.

Operational CAHSEE Data. HumRRO analyzed results from the operational administration of CAHSEE to 10th graders in March of 2002. We presented our initial analyses of technical characteristics of the test form used in the March administration and the resulting passing rates in our Year 3 Evaluation Report (Wise et al., June 2002b).

Longitudinal Surveys of District and School Sample Personnel. The representative sample of 24 districts and approximately 90 of their high schools required replacement of two districts (the original districts dropped out). The surveys, which were administered to principals and ELA and mathematics teachers, provided a continuing look at schools' perspectives of the impact of the CAHSEE on their programs. In addition, we surveyed testing coordinators to identify issues with the administration of the CAHSEE.

The Year 3 report of evaluation activities summarized findings from the data that HumRRO analyzed (Wise, et al., June, 2002b). We reported that available evidence suggested that the CAHSEE had not yet had any impact on retention, dropout rates, or expectations for graduation and post-high-school plans. Progress in developing the exam continued to be noteworthy. We found no significant problems with the development, administration, or scoring of the March 2002 exam. Students had made significant progress in mastering the required ELA skills, but less progress in mathematics. For disadvantaged students, initial passing rates continued to be low and progress for repeat test-takers was limited. Teachers and principals remained positive about the CAHSEE's impact on instruction. We found that more of them now expected positive impact on student motivation and parental involvement. Finally, teachers and principals reported planning and/or implementing a number of constructive programs for helping students master the skills covered by the CAHSEE.

Based on these findings, HumRRO offered the following two general and four more specific recommendations:

General Recommendation 1. Schools needed to focus attention on effective ways of helping students master the required skills in mathematics. The CDE might consider a "what works" effort with respect to remedial programs, and disseminating information about effective programs and practices.

General Recommendation 2. State policymakers needed to engage in a discussion about reasonable options for those students receiving special education services who were unlikely to pass the test.

Specific Recommendation 1. The score scale needed to be changed for students scoring below 300 (chance levels). As a short-term solution HumRRO recommended simply recoding scores below 300 to 299. Teachers, students, and parents would need to be cautioned against interpreting differences below the 300 level. (Our analysis indicated that the CAHSEE tests are acceptably accurate in determining whether students meet the achievement requirements. However, CAHSEE scores do not provide meaningful distinctions for students scoring below chance levels (about 300 on the current score scale). The recommendation refers to a potential danger that students, parents, and teachers could incorrectly interpret a gain below the 300 level as an indicator of significant progress when it is not)

Specific Recommendation 2. Districts and schools should be asked to supply more complete information on who had taken, was taking, and still needed to take the CAHSEE.

Specific Recommendation 3. The CDE should work with schools to collect more information on documentation of student needs for accommodations or modifications.

Specific Recommendation 4. Educational Testing Service (ETS) should follow up on (a) specific test question issues identified in our item review workshops and (b) specific suggestions for improving their new scoring process from our review of their current online training.

Summary of Year 4 Evaluation Activities (September 2003)

The Year 4 evaluation activities included reviewing and analyzing three types of information:

Test Developer Plans and Reports. We continued to monitor test development activities and reports. These included changes to test administration procedures, equating alternate forms, and changes to reporting procedures.

Operational CAHSEE Data. We analyzed results from the six operational administrations of CAHSEE from July 2002 through May 2003. These included continued administration to 11th graders in the Class of 2004 who had not yet passed one or both parts of the CAHSEE and a census administration to 10th graders in the Class of 2005.

Longitudinal Surveys of District and School Sample Personnel. The representative sample of 24 districts and approximately 90 of their high schools

required replacement of one district with three schools. The surveys, which were administered to principals and English-language arts and mathematics teachers, provided a continuing look at schools' perspectives of the impact of the CAHSEE on their programs. In addition, testing coordinators were surveyed for the second year to identify issues with the administration of the CAHSEE.

The Year 4 report (Wise et al., September 2003b) of evaluation activities summarized findings from the data that were analyzed. The report stated that available evidence indicated that the CAHSEE had not led to an increase in dropout rates. Passing rates for students in the Class of 2005 were slightly lower than passing rates for students in the Class of 2004. Yet in comparison with Class of 2004 students when they were in the 10th grade, more students in the Class of 2005 believed that the CAHSEE was important to them. Schools were continuing efforts to ensure that the California academic content standards were covered in instruction and to provide support for students who needed additional help in mastering these standards. Professional development in the teaching of the content standards had not yet been extensive. Teacher and principal expectations for the impact of CAHSEE on students was largely unchanged from prior years. There were no significant problems with local understanding of test administration procedures, but some issues remained with the provision of student data and the assignment of testing accommodations.

Subsequent to the 2003 administrations, the Board deferred implementation of the CAHSEE requirement to the Class of 2006. Based on information summarized in our general findings, we offered four recommendations for future administration of the CAHSEE:

Recommendation 1. Restarting the exam with the Class of 2006 would provide some opportunities for improvement; however, careful consideration should be given to any changes that were implemented.

Recommendation 2. The California Department of Education and the State Board of Education should continue to monitor and encourage efforts by districts and schools to implement effective standards-based instruction.

Recommendation 3. Professional development for teachers offered a significant opportunity for improvement.

Recommendation 4. Further consideration of the CAHSEE requirements for students receiving special education services was needed, in light of the low passing rates for this group. Apparent disparities between racial and ethnic groups within the special education population required further investigation.

Year 4 evaluation activities also included a special study of standards-based instruction, specified under AB 1609 legislation, which included several changes to the CAHSEE. Among other things, this bill called for a special study of the extent to which the development of the CAHSEE and standards-based instruction met the requirements

for a high school graduation test. Evaluation activities were expanded to meet the requirements for this study. A detailed description of the study, along with findings and recommendations, were included in a report to the Board, May 1, 2003 (Wise et al., May 2003a). Key findings from the study were:

Finding 1. The development of the CAHSEE met all of the test standards for use as a graduation requirement.

Finding 2. The CAHSEE requirement had been a major factor leading to dramatically increased coverage of the California academic content standards at both the high school and middle school level and to development or improvement of courses providing help for students who have difficulty mastering these standards.

Finding 3. Available evidence indicated that many courses of initial instruction and remedial courses had only limited effectiveness in helping students master the required standards.

Finding 4. Lack of prerequisite skills may have prevented many students from receiving the benefits of courses that provided instruction in relevant content standards. Lack of student motivation and lack of strong parental support may have played contributing roles in limiting the effectiveness of these courses.

Finding 5. Many factors suggested that the effectiveness of standards-based instruction would improve for each succeeding class after the Class of 2004, but the speed with which passing rates will improve remained unknown.

The report did not offer a specific recommendation on whether the CAHSEE requirement should be deferred. The report suggested the Board consider the issue in terms of the following tradeoffs:

- schools losing motivation for continued attention to students not achieving critical skills if the requirement were deferred; and
- educators becoming distracted by debates and legal actions concerning the adequacy of current instruction if the requirement were continued.

Balancing these tradeoffs required that the Board make a policy decision. The report offered several specific suggestions for consideration if the requirement were continued and other suggestions in the case that the requirement would be deferred. Ultimately, the Board decided to defer the requirement until the Class of 2006. Please see the California Department of Education website [<http://www.cde.ca.gov/ta/tg/hs/evaluations.asp>] for further details on this special study.

The second biennial report of the CAHSEE evaluation was issued in February 2004 (Wise et al., February 2004a). This report summarized evaluation activities and findings since the first biennial report (Wise et al., January 2002a). The report included

information on the 2002 and 2003 administrations and the AB 1609 study and included specific recommendations to the Legislature, the Governor, and the Board as presented in the Summary of Year 4 Activities above.

Summary of Year 5 Evaluation Activities (September 2004)

The Year 5 evaluation activities, which constituted the final year of the original evaluation contract, included reviewing and analyzing three types of information:

Test Developer Plans and Reports. HumRRO continued to monitor test development activities and reports. These included changes to test administration procedures, equating alternate test versions, and changes to reporting procedures.

Operational CAHSEE Data. HumRRO analyzed results from the three operational administrations of CAHSEE in February, March, and May of 2004. These were the first administrations to students in the Class of 2006, the first class now required to pass the CAHSEE for high school graduation.

Longitudinal Surveys of District and School Sample Personnel. We began in 2000 with a representative sample of 24 districts and approximately 90 of their high schools. The number varied slightly from year to year as districts and or schools declined to participate for the year or dropped out completely and were replaced. The 2004 sample included 26 districts (a result of contacting two districts in 2003 as replacements and one declining district agreeing to participate) and 86 schools that did not require any replacements. The surveys, which were administered to principals and ELA and mathematics teachers, provided a continuing look at schools' perspectives of the impact of the CAHSEE on their programs. In addition, testing coordinators were surveyed for the third year to identify issues with the administration of the CAHSEE.

The Year 5 report (Wise et al., September 2004b) of evaluation activities summarized findings from the data that were analyzed for students in the Class of 2006 who took the CAHSEE as 10th graders during the 2003–04 school year and compared these findings to results from the 2002–03 administrations for 10th grade students in the Class of 2005 to look at trends across these two classes. The report stated that performance on the CAHSEE mathematics test improved significantly for the Class of 2006 relative to the Class of 2005 (accounting for differences in score scales). Passing rates for ELA were largely unchanged. Overall, 64 percent of the 10th graders in the Class of 2006 passed both parts, and performance improved for all demographic groups except students receiving special education services. We found no increase in dropout and retention rates despite teachers' and principals' predictions that the CAHSEE requirement would lead to such increases. Principals reported significant increases from 2002 to 2004 in full implementation of programs and practices to help students who are not prepared to pass the CAHSEE and to promote learning for all students. Principal estimates of parents' knowledge of the CAHSEE increased significantly in 2004. Finally,

about 90 percent of the students tested reported that most or all of the topics on the test were covered in courses they had taken.

Based on these findings and those included in prior reports, HumRRO offered the following four general recommendations and one more specific recommendation:

General Recommendation 1. Keep the CAHSEE requirement in place for the Class of 2006 and beyond.

General Recommendation 2. Continue efforts to help students prepare for and take more challenging courses.

General Recommendation 3. Encourage efforts to identify remedial programs that work and disseminate information about these programs to all schools.

General Recommendation 4. Continue to explore options for students receiving special education services (e.g., set realistic expectations, allow more time, investigate curricula, and collect accommodation information).

Specific Recommendation 1. Work to implement a system of student identifiers and student records that provide information, including (a) CAHSEE passing status, (b) students on track to graduate with their class, (c) students who have been retained, and (d) students who have dropped out.

Summary of Year 6 Evaluation Activities (September 2005)

The first year of the evaluation continuation contract included reviewing and analyzing the same three types of information plus some additional requirements:

Test Developer Plans and Reports. HumRRO continued to monitor test development activities and reports. These included changes to test administration procedures, equating alternate forms, and changes to reporting procedures. As part of our review, we conducted independent analyses leading to the conversion tables used to place number-correct scores from the February 2005 administration on the common, equated reporting scale. Results confirmed the conversion tables proposed by ETS. We also attended meetings of the Technical Advisory Group where technical issues relating to CAHSEE development, administration, and reporting were discussed.

Operational CAHSEE Data. We analyzed results from the operational administrations of CAHSEE to 11th graders in September and November of 2004 and to both 10th and 11th graders in February, March, and May of 2005. Tenth grade students took the CAHSEE for the first time in February, March, or May of 2005. Eleventh grade students who had not yet passed could take the CAHSEE twice more in any of the five administrations. In addition to investigating test score reliability, a key issue was the degree of progress made by students in the Class of 2006 who had not yet met the CAHSEE requirement. A second key issue was the success rates for students in

different demographic groups, most notably English learners and students receiving special education services. The operational test data also included a brief survey that students completed after each day of testing.

Instruction Study—Academic Standards Tested by the CAHSEE. We conducted a study similar to one conducted in 2003 and specified under AB 1609 legislation. The current study included surveys of to all districts with high schools that had CAHSEE results (467), a representative sample of 400 high schools, and a sample of 97 feeder middle schools. We also sampled 50 high schools and 24 associated feeder middle schools through site visits.

Item Review Workshops: HumRRO conducted two sets of item review workshops in early June 2005. The workshops were held in the northern and southern parts of the state, and participants were teachers and curriculum specialists familiar with the ELA and mathematics content standards. The reviews covered item quality, universal test design, content alignment, depth of knowledge, and overall coverage. The items reviewed were the most recent ones available, including some operational items.

Policy makers face critical decisions about the CAHSEE as the Class of 2006 nears graduation. As in past years, the 2005 report offered several general recommendations based on observations and findings from evaluation activities. These recommendations were targeted to the Board and the Legislature as they considered additions or modifications to policies concerning the CAHSEE and its use. In addition, several more technical recommendations were intended for the continued improvement of the CAHSEE, and were targeted to the CDE and to the test developer. The Year 6 report (Wise et al., September 2005) of evaluation activities included the following recommendations:

General Recommendation 1: Keep the CAHSEE requirement in place for the Class of 2006 and beyond.

General Recommendation 2: Identify specific options for students who are not able to satisfy the CAHSEE requirement and implement them by June 2006.

General Recommendation 3: Accelerate efforts to implement a statewide system of student identifiers and develop and maintain a database with information on students who have and have not satisfied the CAHSEE requirements.

General Recommendation 4: Collect data from districts on students who are not able to satisfy the CAHSEE requirement by June 2006 and use this information to further refine options for students having difficulty mastering the skills assessed by the CAHSEE.

Specific Recommendation 1: A number of suggestions for improving specific test questions, particularly with respect to making them accessible to all students, were offered based on the item review. These might provide useful insights as

the test development contractor continues to improve and enhance its item development and review procedures.

Specific Recommendation 2: Statistical review of test items should include checks for differential item functioning for students with disabilities.

Specific Recommendation 3: Information on the curriculum and services received by students in special education programs was quite useful. CDE may want to link this information to CAHSEE results on a more regular basis.

Specific Recommendation 4: Conduct a field trial or demonstration project with a small number of districts that already use student identification codes to model the design and use of detailed student data.

Organization and Contents of 2006 Evaluation Report

The 2006 Evaluation Report covers activities performed in the independent evaluation through September 30, 2006.

Chapter 2 presents analyses of the 2005–06 CAHSEE administrations. As this was the first school year for which the CAHSEE took effect, with the consequence that seniors who were unable to pass both parts of the CAHSEE did not receive a diploma, a special emphasis was placed on the senior class. In addition, the results include passing rates for 10th graders in the Class of 2008 in comparison to passing rates for 10th graders in previous classes; passing rates and score gains for 11th graders in the Class of 2007 who did not meet the CAHSEE requirements during their sophomore year; analyses of test modifications and accommodations; and analyses of factors such as mathematics courses taken that were related to success on the CAHSEE.

In addition, brief questionnaires were administered to students upon completion of each CAHSEE test. Analyses include comparisons of current year responses to response patterns in previous years, as well as comparisons among distinct groups of students (e.g., students who passed the CAHSEE versus those who did not).

Chapter 3 provides a closer look at specific student populations, including students with disabilities, English learners, and students retained in grade. Taken as a whole, these populations face specific challenges with respect to the high school exit examination. Analyses include a targeted examination of CAHSEE test results.

Chapter 4 summarizes input from three sets of stakeholders: high school principals, high school ELA and mathematics teachers, and students. We administered surveys to principals and teachers in a longitudinal sample of California high schools. In this chapter, we present responses to the Spring 2006 survey alongside responses to previous years' surveys, so that in addition to the recent responses, we can see trends. HumRRO continued to organize the evaluation information into five critical areas:

- *Awareness* of and familiarity with the CAHSEE
- *Alignment* of the districts' curricula to state/CAHSEE content standards
- Planning and *preparation* for the CAHSEE
- *Expectations of impact* on instruction, passing rates, and consequences of the CAHSEE
- Potential effect on *dropout and graduation rates* and college attendance

Chapter 5 presents trends in educational achievement and persistence through analyses of data on year-by-year high school enrollment trends, graduation and dropout rates, college preparation, and Advanced Placement (AP) test achievement. While these do not directly reflect effects of the CAHSEE, trends over time can be informative in assessing shifts in student achievement.

Chapter 6 presents our Findings and Recommendations based on the data analyses and results presented in previous chapters.

Chapter 2: Results from the 2005–2006 Administrations

Introduction

The legislation establishing the CAHSEE called for the first operational forms of the exam to be administered in spring 2001 to 9th graders in the Class of 2004. At the first administration 9th graders could volunteer, but were not required, to take both portions of the exam. Students who did not pass the exam in that administration were required to take the exam as 10th graders in spring 2002. Preliminary results from the CAHSEE spring 2001 and 2002 administrations were reported in the Year 2 and Year 3 evaluation reports (Wise et al., June 2001; Wise et al., June 2002b). Results from the 2001 administration were reported more fully in the first of the biennial evaluation reports to the Legislature, the Governor, the Board, and the CDE (Wise et al., Jan. 2002a).

The CAHSEE was administered six more times from July 2002 through May 2003 to students in the Class of 2004 who had not yet passed one or both parts. In addition, students from the Class of 2005 were required to take the CAHSEE for the first time as 10th graders in March or May of 2003. Analyses of results from these administrations were reported in the Year 4 evaluation report (Wise, et al., Sep. 2003) and in the second biennial evaluation report (Wise et al., Feb. 2004a).

Subsequent to the 2003 administrations, the requirement to pass the CAHSEE was deferred to the Class of 2006. In 2004, the CAHSEE was modified slightly and administered in spring 2004 to all 10th graders in the Class of 2006. Results from the 2004 administrations were reported in Chapter 2 of the Year 5 evaluation report (Wise, et al., Sep. 2004).

The 2004–05 administrations included both 10th graders in the Class of 2007 taking the CAHSEE for the first time and 11th graders in the Class of 2006 who had not passed the CAHSEE as 10th graders. The 11th graders took the CAHSEE one or more times in September 2004, November 2004, February 2005, March 2005, and May 2005. The 10th graders participated in the February, March, or May 2005 administrations. In addition, a small number of adult education students took the CAHSEE during the 2004–05 school year. Analyses of results from the 2004–05 administrations were reported in Chapter 3 of the 2005 evaluation report (Wise, et al., Sep. 2005). All of these reports are available on the CDE Web site at <http://www.cde.ca.gov/ta/tg/hs/evaluations.asp>.

The 2005–06 CAHSEE administrations were the most complex yet in that three separate classes of high school students were tested. Essentially all 10th grade students in the Class of 2008 were tested for the first time in February, March, or May of 2006. Eleventh grade students in the Class of 2007 who had not yet passed the CAHSEE had multiple opportunities to take the CAHSEE in the fall (September or November 2005) and winter and spring (February, March, or May) administrations. Finally, 12th grade students in the Class of 2006 who still needed to pass the CAHSEE had as many as three opportunities to take the CAHSEE during these same

administrations. As a result of a settlement agreement in the Chapman case¹, Class of 2006 students in special education programs were allowed to satisfy graduation requirements in other ways, although many of them continued to take the CAHSEE.

Analyses of results from the 2005–06 CAHSEE administrations are organized around three main questions:

1. How many 12th graders in the Class of 2006 who had not passed the CAHSEE were able to pass in their senior year, and how many did not meet the CAHSEE requirement by June 2006?
2. How did performance improve for 11th graders in the Class of 2007 who had not yet passed the CAHSEE and what can we expect for those who have not yet passed by the end of 11th grade? Also, how did improved performance for 11th graders in the Class of 2007 compare to improvements seen last year for 11th grade students in the Class of 2006?
3. How did this year's results for 10th graders in the Class of 2008 compare to results for the Classes of 2005 through 2007 when those students took the CAHSEE for the first time as 10th graders in 2003 through 2005 respectively?

Each of these questions is answered for students in specific demographic categories defined by gender, race/ethnicity, economic disadvantage, English-learner or special education status. Results for adult education students are reported briefly, but are not the primary policy focus of these analyses.

As in prior years, some difficulties were encountered in these analyses. Students taking the CAHSEE for the first time were sometimes unable to take both parts in the same administration and so had separate, albeit incomplete, records from two different administrations. In addition, a few students appear to have used two different answer sheets in the same administration, again generating separate incomplete records.

Beginning with the February 2006 administration, most CAHSEE test result records (about 90%) contained a new student identifier that should uniquely identify each student and remain constant over future test administrations. For the 2005–06 administrations, however, data from each answer document still had to be matched across administrations and test years by name and birth date and, in some cases, by district-level student identifiers. Inconsistencies or omissions in coding these fields complicated the process of linking separate records for the same student. Any failure in linking such records led to an overcount of the number of different students tested.

For the 11th and 12th graders, linking problems were even more complicated. First, they may have taken each portion of the CAHSEE two, or in some cases, three times during the 2005–06 school year. Second, it was necessary to match the 2005–06

¹ The Chapman case was a lawsuit filed on behalf of students with disabilities. The parties reached agreement that students with disabilities in the Class of 2006 could receive a diploma even if they did not pass the CAHSEE as long as they met other requirements.

results for these students to results from 2004 and 2005 to determine which students had passed both parts. Many districts appeared to have changed their student identifiers between the 2004–05 and 2005–06 school years. In addition, many students changed schools between years, while others did not progress normally from one grade to the next. Accurate linking for the 11th and 12th graders is essential to answering questions such as “How many students in the Class of 2006 who did not pass last year are still taking the CAHSEE?” and “Where did students who appear to have taken the CAHSEE for the first time as 11th or 12th graders come from?”

Analysis of the Test Score Data

A number of potential issues with the test data were investigated before we analyzed the score results. First, we took steps to match records for students who participated in more than one testing session during the year and then matched students in the 11th and 12th grade to records from prior years. We wanted to remove duplication in counts of the total number of students tested and to be able to estimate the number of students who passed both parts of the CAHSEE. Second, we looked at scoring consistency for the essays, checked the score conversion tables, and looked at the consistency with which the essays were scored.

ETS provided test results, including student responses to individual test questions and to the student questionnaire items, after each of the 2005–06 administrations. In August, it was discovered that these files did not include several thousand students whose records were processed after the item-level data files were produced. In consultation with CDE, we decided to delay analysis and reporting of the 2005–06 test results until more complete data could be obtained. We received an updated data file from ETS on September 12, 2006. While this file did not contain student responses to individual test questions or questionnaire items, it did include corrections to demographic information provided by schools and districts as part of a routine verification process. Normally, the correction window extends well beyond the deliverable date for the annual evaluation report, so this is the first time we had access to updated demographic information. Except as noted, the analyses of student test results reported here are based on the updated file.

Tables 2.1 and 2.2 show the number of test records from each of the five CAHSEE administrations during the 2005–06 school year that were included in the updated data file. Separate counts are shown by grade and for students taking the regular administration of the test, those taking it with accommodations, and those taking it with modifications. Results are shown for 18,893 administrations to adult education students; 59 percent of those taking the ELA test and 49 percent of those taking the Mathematics test received passing scores. Adult education students and students with an invalid grade code were eliminated from further analyses, which focused on students in high school.

As noted above, many students participated in more than one administration so the number of students tested was fewer than the number of answer documents processed. Attempts to count individual students, rather than just answer documents, are described in the next section.

Table 2.1. Number of CAHSEE 2005–06 ELA Answer Documents and Percent Passing by Administration Type and Date

Administration	Administration Date:						
Type	Statistic	Sep. 05	Nov. 05	Feb. 06	Mar. 06	May 06	Total
10 th Grade Answer Documents							
Regular	N	NA	NA	169,971	293,511	12,989	476,471
	% Pass	NA	NA	77.4%	79.2%	50.5%	77.8%
Accommodation	N	NA	NA	2,513	3,900	132	6,545
	% Pass	NA	NA	26.3%	29.9%	20.5%	28.3%
Modification	N	NA	NA	923	1,205	64	2,192
	% > 349	NA	NA	23.7%	27.6%	15.6%	25.6%
Not Tested*	N	NA	NA	16,157	26,130	9,759	52,046
TOTAL Tested	N	NA	NA	173,407	298,616	13,185	485,208
	% Pass	NA	NA	76.2%	78.3%	50.0%	76.7%
11 th Grade Answer Documents							
Regular	N	20,504	70,843	15,634	34,870	19,004	160,855
	% Pass	33.1%	39.4%	32.5%	32.8%	24.9%	35.0%
Accommodation	N	601	2,503	580	1,719	731	6,134
	% Pass	9.5%	16.8%	12.8%	16.9%	13.5%	15.4%
Modification	N	382	1,695	355	1,259	691	4,382
	% > 349	12.8%	17.6%	13.8%	19.3%	17.7%	17.4%
Not Tested*	N	11,918	41,538	9,046	23,583	13,401	99,486
TOTAL Tested	N	21,487	75,041	16,569	37,848	20,426	171,371
	% Pass	33.4%	37.8%	31.1%	31.0%	23.6%	33.4%
12 th Grade Answer Documents							
Regular	N	23,320	31,511	24,253	15,708	13,604	108,396
	% Pass	32.9%	36.9%	30.5%	32.2%	19.4%	32.2%
Accommodation	N	887	1,222	1,305	702	604	4,720
	% Pass	15.0%	21.3%	17.5%	21.4%	15.9%	18.4%
Modification	N	805	1,441	1,606	828	505	5,185
	% > 349	14.7%	23.6%	21.3%	17.6%	8.9%	19.1%
Not Tested*	N	14,286	21,157	18,957	12,329	12,876	79,605
TOTAL Tested	N	25,012	34,174	27,164	17,238	14,713	118,301
	% Pass	31.2%	36.9%	28.0%	29.1%	18.6%	30.2%
Adult Education Answer Documents							
Regular	N	630	4,155	2,049	4,835	1910	13,579
	% Pass	53.3%	60.1%	56.6%	62.9%	53.3%	59.3%
Accommodation	N	3	0	4	4	3	14
	% Pass	66.6%	0.0%	0.0%	50.0%	33.3%	35.7%
Modification	N	0	6	2	3	0	11
	% > 349	0.0%	16.7%	0.0%	0.0%	0.0%	9.1%
Not Tested*	N	222	1,337	767	1,945	1018	5,289
TOTAL Tested	N	633	4,161	2,055	4,842	1913	13,604
	% Pass	53.4%	60.0%	56.5%	62.8%	53.2%	59.2%
Missing/Invalid Grade		0	321	15	285	291	912
		0.0%	47.4%	46.7%	61.8%	24.1%	44.4%

Note. *Students who took only the mathematics test are shows as "Not Tested" in this table.

Table 2.2. Number of CAHSEE 2005–06 Mathematics Answer Documents and Percent Passing by Administration Type and Date

Administration	Administration Date:						
Type	Statistic	Sep. 05	Nov. 05	Feb. 06	Mar. 06	May 06	Total
10 th Grade Answer Documents							
Regular	N	NA	NA	169,771	293,257	12,364	475,392
	% Pass	NA	NA	73.7%	78.4%	49.9%	76.0%
Accommodation	N	NA	NA	2,409	3,357	116	5,882
	% Pass	NA	NA	36.3%	42.0%	27.6%	39.4%
Modification	N	NA	NA	1,657	2,769	154	4,580
	% > 349	NA	NA	25.9%	26.6%	16.2%	26.0%
Not Tested*	N	NA	NA	15,727	25,363	10,310	51,400
TOTAL Tested	N	NA	NA	173,837	299,383	12,634	485,854
	% Pass	NA	NA	72.5%	77.3%	49.1%	74.8%
11 th Grade Answer Documents							
Regular	N	22,477	77,056	16,773	38,938	19,958	175,202
	% Pass	31.8%	34.6%	28.8%	35.2%	28.5%	33.1%
Accommodation	N	548	2,206	455	1,281	531	5,021
	% Pass	16.1%	21.4%	19.6%	24.4%	17.1%	21.0%
Modification	N	765	4,073	796	2,820	1523	9,977
	% > 349	12.0%	15.5%	13.6%	21.1%	20.0%	17.4%
Not Tested*	N	9,615	33,244	7,591	18,392	11,815	80,657
TOTAL Tested	N	23,790	83,335	18,024	43,039	22,012	190,200
	% Pass	30.4%	32.5%	27.3%	32.6%	26.3%	31.1%
12 th Grade Answer Documents							
Regular	N	23,764	33,264	25,750	17,402	14,156	114,336
	% Pass	30.1%	34.4%	30.4%	37.0%	21.8%	31.4%
Accommodation	N	658	953	851	487	343	3,292
	% Pass	20.1%	22.5%	22.9%	28.5%	11.7%	21.9%
Modification	N	1567	2,955	2,899	1709	1141	10,271
	% > 349	17.0%	18.8%	17.7%	19.4%	9.8%	17.3%
Not Tested*	N	13,309	18,159	16,621	9,969	11,949	70,007
TOTAL Tested	N	25,989	37,172	29,500	19,598	15,640	127,899
	% Pass	28.1%	31.3%	27.2%	33.6%	20.0%	28.7%
Adult Education Answer Documents							
Regular	N	675	4,586	2,181	5,532	2194	15,168
	% Pass	41.9%	48.2%	46.7%	54.1%	44.2%	49.3%
Accommodation	N	0	2	1	2	0	5
	% Pass		0.0%	0.0%	0.0%	0.0%	0.0%
Modification	N	0	14	8	16	6	44
	% > 349		7.1%	25.0%	25.0%	16.7%	18.2%
Not Tested*	N	180	896	632	1,237	731	3,676
TOTAL Tested	N	675	4,602	2,190	5,550	2200	15,217
	% Pass	41.9%	48.0%	46.5%	54.0%	44.1%	49.1%
Missing/Invalid Grade		1	337	19	284	305	946
		% Pass	100.0%	40.4%	42.1%	62.0%	41.9%

Note: *Students who took only the mathematics test are shown as "Not Tested" in this table.

Matching Student Records from Different Administrations

In response to data analysis requirements in the 2001 federal No Child Left Behind (NCLB) Act, the state legislature passed SB 1453 requiring the establishment of student identifiers for all California public or charter school students. When the statewide student identifiers called for by SB 1453 are fully implemented by the California School Information Services (CSIS), matching records for students participating in different test administrations will be “relatively” easy. CSIS student identifiers were introduced for nearly all students in the February 2006 CAHSEE administration. CSIS codes were filled in for some students in the Fall 2005 administrations, but many schools had not yet begun using these identifiers. We used the CSIS codes as part of our process for matching records in the 2006 administrations, but also to match records on other identifiers (school codes with student names and birth dates and, in some cases, the district’s own student identifiers). In matching student records to results from prior years, when CSIS codes were not yet available, we had to rely entirely on the more fallible other identifiers. As usual, there were numerous cases in which student names and birth dates were not coded consistently across different administrations. In addition, the student identifiers supplied by districts were sometimes coded incorrectly or inconsistently.

We matched records in two phases. In the first phase, we matched records for 10th graders within and across the February, March, and May administrations and matched records for 11th and 12th graders within and across all five administrations. In the second phase, we matched the merged records from the 2005–06 administrations with records from the 2003–04 and 2004–05 administrations. For the most part 12th graders from the 2005–06 administration were matched to 11th graders in the 2004–05 administrations while 10th graders in the 2004 administrations and 11th graders this year were matched to 10th graders in the 2004–05 administrations. There were, however, a number of cases where students appear to have either skipped or repeated a grade from one year to the next. The matching process was described in more detail in our 2005 Annual Report (Wise, et al., 2005).

Table 2.3 shows the number of answer documents for each test and grade, the number of students tested in each subject and grade (after accounting for students who tested more than once during the 2005–06 school year), and the number of students for whom prior-year records were identified. Prior-year matches were found for about one percent of the current 10th graders, three-quarters of the current 11th graders, and two-thirds of the 12th graders. Prior-year data were not found for students who were new to the state or for students whose identifiers were significantly miscoded. The lower match rate for 12th graders was not unexpected. Since most students who have been in the state prior to their senior years passed the CAHSEE before reaching the 12th grade, students who are new to the state constitute a higher proportion of seniors who took the CAHSEE.

Table 2.3. Number of 2005–06 Answer Documents and Number of Students after Matching

Test	Grade		
	10	11	12
<i>Number of Answer Documents</i>			
With ELA Test	485,208	171,371	118,301
With Math Test	485,854	190,200	127,899
Total (Either or Both)	537,254	270,857	197,906
<i>Number of Students</i>			
With ELA Test	477,705	122,575	72,028
With Math Test	480,577	132,477	76,425
Total (Either or Both)	505,045	174,568	107,924
<i>Number of Students Matched to Prior-Year Records</i>			
With ELA Test	2,463	90,540	48,913
With Math Test	2,801	99,934	51,550
Total (Either or Both)	5,192	132,491	72,806

Table 2.4 shows the relationship between current and prior grades for students with matching records from prior years. As expected, most of the current 11th graders were 10th graders in 2004–05 and most of the current 12th graders were 11th graders. Just over 5,000 students were found to be in the 10th grade both years and just over 6,000 students were found to be in the 11th grade for both years. Another 4,400 students appear to have skipped from the 10th grade directly to the 12th grade.

Table 2.4. Number of Students Matched to Prior-Year Records by Current and Prior Grade

Current Grade In 2005–06 Test Records	Prior Grade in 2004–05 Test Records		
	Total Matched	10	11
10	5,192	4,987	205
11	132,491	126,335	6,156
12	72,806	4,423	68,383
Other	174	136	38
Total	210,663	135,881	74,782

Computing Passing Rates

A key issue in computing and reporting passing rates for the CAHSEE is what to use as the denominator. The two main choices are the number of students who took each test and the number of students subject to the CAHSEE requirement. In this report, as in our prior reports, we have opted for the latter, reporting the proportion of all students in the target populations who have passed. However, the number of students in the target populations fluctuates with daily enrollment changes. Table 2.5 compares fall enrollment counts (reported by DataQuest), enrollment counts from the STAR tests that occurred closer in time to the CAHSEE testing dates, and record counts from the CAHSEE. The CAHSEE is now also being used for 10th grade accountability under NCLB requirements. Essentially all students must be tested to meet NCLB participation requirements, so the CAHSEE counts appear to be reasonably complete. Total CAHSEE record counts were used in computing passing rates for this report. STAR

reports include the number of students tested in different demographic groups, but do not include separate enrollment counts for these groups. The CAHSEE data provide for consistent counts for each demographic group of interest. Note that the CAHSEE record counts used here were based on matching records across administrations within each testing year to avoid counting students more than once. This step requires access to student identifiers. The counts reported here thus provide new information not available to the CDE, since student identifiers are not included on CDE files.

Table 2.5. Tenth Grade Enrollment Estimates from DataQuest, STAR, and CAHSEE

Source	2002–03 10 th Graders	2003–04 10 th Graders	2004–05 10 th Graders	2005–06 10 th Graders
Fall Enrollment (Data Quest)	471,648	490,214	497,197	515,681
STAR Reported Enrollment	457,181	475,181	481,983	499,770
STAR Students Tested (10 th Grade ELA)	427,454	452,217	462,693	482,778
CAHSEE Student Counts*	425,066	459,199	470,891	505,045
CAHSEE Counts as Percent of Fall Enrollment	90.1%	93.7%	94.7%	97.9%
CAHSEE Students Taking the ELA Test	402,594	450,479	461,957	477,705
CAHSEE Students Taking the Math Test	414,903	451,138	462,158	480,577
CAHSEE Students Taking Both Tests	392,431	442,418	453,224	473,192
Percent of Students Taking Both Tests	92.3%	96.3%	96.2%	93.7%

Note. *CAHSEE record counts, after merges to remove duplication, were used in computing passing rates.

Equating the 2005 Test Forms

We did not conduct extensive checks on the equating of alternate forms. Analyses conducted in prior years have verified the accuracy of the procedures used by ETS to ensure that scores are comparable. The equating procedures result in a table that maps number correct (raw) scores onto the 275-450 reporting scale. These mappings vary slightly across the forms used with the different administrations to reflect small differences in the overall difficulty of the different test forms. We did check that the scoring tables generated by ETS equating procedures were applied properly. Tables 2.6 and 2.7 show the raw-to-scale score conversions used with each of the 2005–06 CAHSEE ELA and mathematics test forms.

Table 2.6. Raw-to-Scale Score Conversions for the 2005–06 ELA Tests

Raw Score	Scale Score					Raw Score	Scale Score				
	Sep. 05	Nov. 05	Feb. 06	Mar. 06	May 06		Sep. 05	Nov. 05	Feb. 06	Mar. 06	May 06
1-15	275	275	275	275	275	51	341	345	342	343	337
16	275	277	275	275	275	52	343	346	344	344	339
17	277	279	278	276	275	53	344	348	346	346	341
18	279	282	280	278	275	54	346	350	348	348	343
19	282	284	282	281	277	55	348	352	350	350	345
20	284	287	285	283	279	56	350	354	352	352	347
21	286	289	287	285	281	57	352	356	354	354	348
22	<u>288</u>	<u>291</u>	<u>289</u>	<u>287</u>	<u>283</u>	58	354	358	356	356	350
23	290	294	291	289	285	59	356	360	359	359	352
24	292	296	293	291	287	60	359	362	361	361	354
25	294	298	295	293	289	61	361	365	363	363	356
26	296	300	297	295	291	62	363	367	365	365	359
27	298	302	299	297	293	63	365	369	367	367	361
28	300	304	301	299	295	64	367	371	370	369	363
29	302	306	303	301	297	65	370	374	372	372	365
30	304	307	305	303	298	66	372	376	375	374	367
31	305	309	306	305	300	67	375	379	377	377	370
32	307	311	308	307	302	68	377	381	380	379	372
33	309	313	310	309	304	69	380	384	382	382	374
34	311	315	312	311	306	70	383	387	385	384	377
35	312	316	314	312	308	71	385	390	388	387	379
36	314	318	315	314	309	72	388	393	391	390	382
37	316	320	317	316	311	73	391	396	394	393	385
38	318	322	319	318	313	74	395	399	397	396	388
39	319	323	321	320	315	75	398	402	400	399	391
40	321	325	322	322	317	76	402	406	404	403	394
41	323	327	324	324	319	77	405	409	408	407	397
42	325	329	326	325	320	78	409	413	412	410	401
43	326	330	328	327	322	79	413	417	416	415	404
44	328	332	330	329	324	80	418	421	420	419	409
45	330	334	331	331	326	81	423	426	425	424	413
46	332	336	333	333	328	82	428	431	431	430	418
47	333	337	335	335	330	83	434	436	437	436	423
48	335	339	337	337	331	84	440	442	443	442	428
49	337	341	339	339	333	85	447	449	450	450	435
50	339	343	341	341	335	86	450	450	450	450	443
						87-90	450	450	450	450	450

Note. Bolded numbers reflect minimum scores for passing the diploma requirement (the first bolded number in each column) and for proficiency as used in school accountability (the second bolded number); underlined scale scores indicate expected scores from guessing alone (chance).

Table 2.7. Raw-to-Scale Score Conversions for the 2005–06 Mathematics Tests

Raw Score	Scale Score					Raw Score	Scale Score				
	Sep. 05	Nov. 05	Feb. 06	Mar. 06	May 06		Sep. 05	Nov. 05	Feb. 06	Mar. 06	May 06
0-9	275	275	275	275	275	41	345	345	347	348	347
10	276	275	277	276	278	42	347	347	349	350	349
11	280	279	281	280	282	43	349	349	351	351	350
12	283	282	284	283	285	44	351	351	353	353	352
13	286	285	287	287	288	45	353	353	355	355	354
14	289	289	290	290	291	46	354	354	356	357	356
15	292	291	293	293	294	47	356	356	358	359	358
16	295	294	296	296	297	48	358	358	360	361	359
17	298	297	299	298	300	49	360	360	362	363	361
18	300	300	301	301	302	50	362	362	364	365	363
19	303	302	304	303	304	51	364	364	366	366	365
20	<u>305</u>	<u>304</u>	<u>306</u>	<u>306</u>	<u>307</u>	52	366	366	368	368	367
21	307	307	309	308	309	53	368	368	370	370	369
22	309	309	311	311	311	54	370	370	372	372	371
23	312	311	313	313	313	55	372	372	374	375	373
24	314	313	315	315	316	56	374	374	376	377	375
25	316	315	317	317	318	57	376	376	378	379	377
26	318	318	319	319	320	58	378	378	380	381	379
27	320	320	321	321	322	59	380	380	382	383	381
28	322	322	323	323	323	60	383	383	385	386	383
29	324	323	325	325	325	61	385	385	387	388	386
30	325	325	327	327	327	62	387	387	389	390	388
31	327	327	329	329	329	63	390	390	392	393	391
32	329	329	331	331	331	64	393	393	395	396	393
33	331	331	333	333	333	65	395	395	397	398	396
34	333	333	335	335	335	66	398	398	400	401	399
35	335	335	336	337	336	67	401	401	403	404	402
36	336	337	338	339	338	68	405	405	407	408	405
37	338	338	340	340	340	69	408	408	410	411	408
38	340	340	342	342	342	70	412	412	414	415	412
39	342	342	344	344	343	71	416	416	418	419	416
40	344	344	346	346	345	72	421	420	422	424	421
						73	426	425	427	429	425
						74	431	431	433	434	431
						75	438	438	439	441	438
						76	446	445	447	449	445
						77-80	450	450	450	450	450

Note. Bolded numbers reflect minimum scores for passing the diploma requirement (the first bolded number in each column) and for proficiency as used in school accountability (the second bolded number); underlined scale scores indicate expected scores from guessing alone (chance).

Scoring Consistency

In past reports, we have examined the accuracy of the scores generated from parallel forms of the exam. During the Year 5 evaluation, we monitored ETS's analysis of item-level statistics from each administration and found no significant changes from the results for prior forms. More complete information on test accuracy may be found in technical documentation provided by ETS.

For the 2005–06 test administrations, we continued to analyze consistency in the scoring of student essays. Prior to the 2003-04 school year, each student taking the ELA test was required to write two essays, the first involving analysis of an associated text and the second in response to a freestanding question that did not involve text processing. Beginning in 2004, the ELA test was shortened and students were required to write only one essay. In the 2004–05 test year, the type of essay prompt varied across administrations. In the 2005–06 administrations, stand-alone prompts were used in each administration.

As in prior years, each essay was graded by at least two different raters following a four-point rubric that indicated the essay response characteristics required for each score level. Four was the highest score; a score of zero was assigned to responses that were off-topic, illegible, or left blank. Since the scoring rubrics vary from question to question, we monitored the level of agreement between independent raters for each question used with each administration. Table 2.8 shows, for the 2005–06 test forms and for test forms from prior years: (a) how often (what percent of the time) there was exact agreement, (b) how often there was a difference of just one score point, and (c) how often there was a difference of more than one score point. Whenever there was an initial difference of more than one score point, the essay was read again by a third, more experienced reader and, if necessary, a fourth so that all operational scores resulted from two raters who agreed to within a single score point.

This year, we analyzed scoring consistency separately for 10th, 11th, and 12th grade students. While the questions and the scoring process were identical for these two groups, the distribution of papers was not. Tenth grade students generated many more essays rated as 3 or 4 in comparison to 11th and 12th grade students.

Overall agreement rates were slightly higher compared to last year. For 10th graders, exact agreement rose from 66.5 to 66.9 percent while disagreement by more than one score point dropped from 0.9 to 0.7 percent. Agreement on the essays written by 11th graders increased a bit more and agreement on the 12th grade essays was very similar. While the overall rates are acceptable, exact agreement rates were lower (and serious disagreement rates were slightly higher) for 10th grade essays in the February and March administrations, when the volume is particularly high. ETS should strive to pull the exact agreement rates up toward 70 percent for all administrations, including these high volume administrations, and also try to reduce the rate of serious disagreement below 0.5 percent.

Table 2.8. Scoring Consistency for Student Essays

Administration	Percent of Essays at Each Level of Agreement					
	1 st Essay (Associated Text)			2 nd Essay (Stand-alone Prompt)		
	Exact	+/- 1	+/- > 1	Exact	+/- 1	+/- > 1
2002-03 School Year						
July 2002	65.2	33.0	1.8	66.2	32.2	1.6
Sep. 2002	68.2	30.7	1.0	69.0	30.0	0.9
Nov. 2002	71.3	27.9	0.8	68.4	30.8	0.8
Jan. 2003	70.6	28.2	1.1	70.3	28.9	0.8
Mar. 2003	64.5	33.6	1.9	62.2	36.2	1.6
May 2003	70.1	29.2	0.7	69.4	29.9	0.7
2003-04 School Year						
Feb. 2004				66.3	33.0	0.8
Mar. 2004	62.0	36.6	1.4			
May 2004				68.5	31.5	0.0
2004-05 School Year						
Sep. 2004, 11 th Grade				71.6	28.0	0.3
Nov. 2004, 11 th Grade	67.1	31.6	1.2			
Feb. 2005, 10 th Grade	65.8	33.3	0.9			
Feb. 2005, 11 th Grade	70.7	28.6	0.7			
Mar. 2005, 10 th Grade	66.6	32.5	0.9			
Mar. 2005, 11 th Grade	73.5	26.0	0.6			
May 2005, 10 th Grade				74.0	25.7	0.2
May 2005, 11 th Grade				75.4	24.4	0.2
2004–05, 10 th Grade	66.5	32.6	0.9			
2004–05 11 th Grade	70.3	28.8	0.9			
2005-06 School Year						
Sep. 2005 11 th Grade				74.1	25.5	0.4
Sep. 2006, 12 th Grade				73.8	25.8	0.4
Nov. 2005, 11 th Grade				72.0	27.5	0.5
Nov. 2005, 12 th Grade				71.6	27.8	0.5
Feb. 2006, 10 th Grade				66.3	32.8	0.9
Feb. 2006, 11 th Grade				74.4	25.1	0.4
Feb. 2006, 12 th Grade				72.9	26.5	0.5
Mar. 2006, 10 th Grade				67.0	32.4	0.6
Mar. 2006, 11 th Grade				75.0	24.7	0.3
Mar. 2006, 12 th Grade				75.6	24.1	0.3
May 2006, 10 th Grade				71.0	28.4	0.5
May 2006, 11 th Grade				74.7	25.0	0.3
May 2006, 12 th Grade				76.6	23.1	0.3
2005-06, 10 th Grade				66.9	32.4	0.7
2005-06, 11 th Grade				73.5	26.1	0.4
2005-06, 12 th Grade				73.6	26.0	0.4

Results for the March 2006 form indicate slight improvements in the scoring accuracy for 10th graders and a more noticeable improvement in accuracy for 11th graders in comparison to all of last year.

Tables 2.9 through 2.11 provide more detailed information on scores assigned by each of the two independent raters for 10th graders, 11th graders, and 12th graders in the March 2006 administration, the administration with the highest volume of essays to be scored. There was near perfect agreement on the essays judged to be unscorable

(score level 0). There was generally good agreement on essays assigned to score levels 1 through 3. If the first reader assigned a score at one of these levels, the second reader was most likely to assign the same score. For 11th graders, most of whom had taken but not passed the ELA test previously, very few essays were assigned a score of 4. Agreement at this level was correspondingly less. If the first reader assigned a score of 4, the second reader was most likely to assign a score of 3.

Table 2.9. Percent of 10th Grade Essays Assigned Each Score Level by Each Rater in the March 2006 Administration

First Rater	Second Rater				
	0	1	2	3	4
0	1.35	0.00	0.00	0.00	0.00
1	0.00	2.29	1.24	0.02	0.00
2	0.00	1.15	28.51	10.33	0.27
3	0.00	0.02	10.39	30.76	4.57
4	0.00	0.00	0.13	4.67	4.10
Average Score from First Rater					2.6
Average Score from Second Rater					2.6

Note. Bolded numbers indicate perfect agreement between the two raters.

Table 2.10. Percent of 11th Grade Essays Assigned Each Score Level by Each Rater in the March 2006 School Administration

First Rater	Second Rater				
	0	1	2	3	4
0	3.48	0.00	0.00	0.00	0.00
1	0.00	6.98	3.82	0.03	0.00
2	0.00	3.99	56.26	7.76	0.11
3	0.00	0.03	8.05	8.00	0.50
4	0.00	0.00	0.08	0.59	0.32
Average Score from First Rater					2.0
Average Score from Second Rater					2.0

Note. Bolded numbers indicate perfect agreement between the two raters.

Table 2.11. Percent of 12th Grade Essays Assigned Each Score Level by Each Rater in the March 2006 Administration

First Rater	Second Rater				
	0	1	2	3	4
0	3.74	0.00	0.00	0.00	0.00
1	0.00	7.30	4.02	0.04	0.01
2	0.00	3.57	56.97	7.71	0.06
3	0.00	0.05	7.84	7.29	0.44
4	0.00	0.00	0.13	0.57	0.29
Average Score from First Rater					2.0
Average Score from Second Rater					2.0

Note. Bolded numbers indicate perfect agreement between the two raters.

Test Results

Class of 2006 – Seniors Struggle to Meet Graduation Deadline

A year ago, we estimated that approximately 363,000 students in the Class of 2006 entering their senior year had met the CAHSEE requirement, but that 100,000 entering seniors had not. Subsequently, the legislature passed a bill implementing a settlement agreement in the Chapman case that provided a one-year exemption for students in special education programs who met other requirements. With this settlement, approximately 26,000 students with disabilities in the Class of 2006 were potentially exempted, still leaving nearly 75,000 students who had to pass the CAHSEE by June 2006 to receive their diplomas on time.

HumRRO worked with CDE to analyze test results for seniors after each of the 2005–06 administrations. The department issued press releases based on HumRRO's findings counting down the numbers of students who still had to complete the CAHSEE requirement, overall and for specific subgroups (see <http://www.cde.ca.gov/nr/ne/yr06/>). HumRRO used the updated data files received in September to reanalyze results through May 2006. Tables 2.12 through 2.14 show the estimated number and percent of Class of 2006 seniors who have passed the CAHSEE.

The figures in these tables are labeled as “estimates” because they are not exact counts. We could not match all different answer documents for each student precisely. In computing the estimates shown in these tables, several adjustments were made to the prior year's estimates for students who had not passed both parts.

- First, students with disabilities who had not passed by the end of 11th grade were excluded from the analyses since these students were eligible for a waiver if they met other criteria.
- Next, we removed students who appeared to shift to a different high school class, mostly because they were either retained in a grade skipped or grade between 2005 and 2006.
- We then added in students who joined the target class because of retention or grade skipping.
- Finally, we removed students in the 2005 test files who were not matched to a 2006 test record and added back in students in the 2006 test files who were not matched to a 2005 test record. In many cases these were the same students who could not be matched because of coding problems. In other cases, these were students who transferred in or out of the state, into or out of private schools, students who missed the testing window in 2005, or students who left the school system for other reasons. It is important to note that there were more unmatched 2006 students than unmatched 2005 students, so we showed a net addition to the estimated size of the target classes.

In the tables that follow, we believe, the most important values are the estimates of the numbers of students who have not yet passed either or both parts of the CAHSEE. The percentages shown are subject to some debate due to differences of opinion as to the appropriate denominator (the base for computing the percentages). Students who passed the CAHSEE, but subsequently left the state or dropped out are included in the denominator, since we have no basis for estimating the number of such students. Students who are still trying to pass the CAHSEE are also included in the denominator. Students who had not passed, not did not take the CAHSEE during the 2005–06 school year are not included in the denominator.

Table 2.12. Estimated Number and Percent of Students in the Class of 2006 Passing Both CAHSEE Tests through May 2006

Passed Both		Number of Students*				Percent of Students			
Group	Grade 10	Grade 11	Grade 12	Not Yet	Total	Grade 10	Grade 11	Grade 12	Total Passed
All Students	295,226	67,810	36,308	38,574	437,918	67.4%	15.5%	8.3%	91.2%
Females	150,818	32,268	17,965	18,344	219,395	68.7%	14.7%	8.2%	91.6%
Males	144,356	35,430	18,273	20,346	218,405	66.1%	16.2%	8.4%	90.7%
Asian	34,709	4,583	2,495	2,081	43,868	79.1%	10.4%	5.7%	95.3%
Hispanic	92,362	33,249	19,617	24,636	169,864	54.4%	19.6%	11.5%	85.5%
African American	16,891	6,893	4,404	5,472	33,660	50.2%	20.5%	13.1%	83.7%
White, non-Hispanic	133,650	18,921	7,643	4,407	164,621	81.2%	11.5%	4.6%	97.3%
Economically Disadvantaged	88,918	32,524	18,607	23,302	163,351	54.4%	19.9%	11.4%	85.7%
English Learner	24,783	17,032	12,036	16,989	70,840	35.0%	24.0%	17.0%	76.0%
Special Education**	7,993	6,675	4,349	20,790	39,807	20.1%	16.8%	10.9%	47.8%

* Students with missing demographic information are excluded from counts by gender or race/ethnicity.

** Students in special education programs who had not passed the CAHSEE by the end of 11th grade and were subsequently exempted from the CAHSEE requirement were excluded from all rows of the table except for the last row.

The estimates indicate that just under half (36,000 of 75,000) of seniors who had yet to pass the CAHSEE did so during the 2005–06 school year. Overall, we estimate that just under 40,000 students failed to meet the CAHSEE requirement. We do not know how many of these students failed to meet other requirements as well. Informal data collected by CDE from several districts suggest that over half had also not met course requirements. The 40,000 seniors who did not meet the CAHSEE requirement included 17,000 English learners, 23,000 economically disadvantaged students, and 25,000 Hispanic students. Excluding students with disabilities exempted from the CAHSEE requirement, the cumulative passing rate for English learners was 76 percent and the passing rate for Hispanic and African-American and Hispanic students was about 85 percent, compared to an overall passing rate of 91 percent. Also note that nearly half (48%) of students in special education programs passed both parts of the CAHSEE, even though most were not required to pass if they had not done so by the end of Grade 11.

Table 2.13. Estimated Number and Percent of Students in the Class of 2006 Passing the CAHSEE ELA Test through May 2006

Passed ELA		Number of Students*				Percent of Students			
Group	Grade 10	Grade 11	Grade 12	Not Yet	Total	Grade 10	Grade 11	Grade 12	Total Passed
All Students	334,712	48,987	28,814	25,405	437,918	76.4%	11.2%	6.6%	94.2%
Females	173,969	21,615	13,159	10,652	219,395	79.3%	9.9%	6.0%	95.1%
Males	160,733	27,220	15,606	14,846	218,405	73.6%	12.5%	7.1%	93.2%
Asian	35,817	3,983	2,278	1,790	43,868	81.6%	9.1%	5.2%	95.9%
Hispanic	112,719	24,525	15,662	16,958	169,864	66.4%	14.4%	9.2%	90.0%
African American	22,409	4,781	3,413	3,057	33,660	66.6%	14.2%	10.1%	90.9%
White, non-Hispanic	144,083	12,442	5,743	2,353	164,621	87.5%	7.6%	3.5%	98.6%
Economically Disadvantaged	108,305	23,849	14,989	16,208	163,351	66.3%	14.6%	9.2%	90.1%
English Learner	31,817	14,880	10,587	13,556	70,840	44.9%	21.0%	14.9%	80.9%
Special Education**	12,245	7,137	4,343	16,082	39,807	30.8%	17.9%	10.9%	59.6%

* Students with missing demographic information are excluded from counts by gender or race/ethnicity.

** Students in special education programs who had not passed the CAHSEE by the end of 11th grade and were subsequently exempted from the CAHSEE requirement were excluded from all rows of the table except for the last row.

Table 2.14. Estimated Number and Percent of Students in the Class of 2006 Passing the CAHSEE Mathematics Test through May 2006

Passed Math		Number of Students*				Percent of Students			
Group	Grade 10	Grade 11	Grade 12	Not Yet	Total	Grade 10	Grade 11	Grade 12	Total Passed
All Students	329,661	50,534	30,167	27,556	437,918	75.3%	11.5%	6.9%	93.7%
Females	163,630	26,410	15,412	13,943	219,395	74.6%	12.0%	7.0%	93.6%
Males	165,647	24,355	14,693	13,710	218,405	75.8%	11.2%	6.7%	93.7%
Asian	38,542	2,824	1,672	830	43,868	87.9%	6.4%	3.8%	98.1%
Hispanic	111,588	24,947	16,129	17,200	169,864	65.7%	14.7%	9.5%	89.9%
African American	19,352	5,696	3,958	4,654	33,660	57.5%	16.9%	11.8%	86.2%
White, non-Hispanic	140,771	13,938	6,502	3,410	164,621	85.5%	8.5%	3.9%	97.9%
Economically Disadvantaged	109,237	23,436	14,702	15,976	163,351	66.9%	14.3%	9.0%	90.2%
English Learner	39,855	11,951	8,998	10,036	70,840	56.3%	16.9%	12.7%	85.8%
Special Education **	11,819	6,489	3,803	17,696	39,807	29.7%	16.3%	9.6%	55.5%

* Students with missing demographic information are excluded from counts by gender or race/ethnicity.

** Students in special education programs who had not passed the CAHSEE by the end of 11th grade and were subsequently exempted from the CAHSEE requirement were excluded from all rows of the table except for the last row.

We conducted further analyses to investigate the relationship of what we knew about seniors' coursework to their success on the CAHSEE. There is a great deal of variation in the mathematics curriculum of different students and the CAHSEE answer document asks in which grade) various mathematics courses are taken. For the most part, student responses to this question appear to be reliable, although students sometimes mark multiple grades for the same course. When this happens, the ETS software treats it as an invalid response even though students may have, in fact, repeated a course. Some students did not respond to this question.

We looked at the highest mathematics course taken for seniors in the Class of 2006. Table 2.15 shows the percentage of students at each course level and also the percentage of students in the category that passed the CAHSEE math test in their senior year. About 37 percent of seniors taking CAHSEE mathematics had taken courses beyond Algebra 1 and more than half of these seniors passed. At least 15 percent of seniors had not taken Algebra I; only one-third of these students passed. Even if they passed the CAHSEE, these students would still likely fail to meet the Algebra I graduation requirement.

Table 2.15. Distribution of 12th Graders and Percent Passing Mathematics by Highest Mathematics Course Taken

Highest Mathematics Course Taken	Percent of All 12 th Graders Taking the CAHSEE Math Test	Percent in Category Passing CAHSEE Math
1. General Math	4.6%	32.4%
2. Pre-Algebra	11.0%	39.8%
3. Algebra I/Integrated Math 1	26.9%	39.2%
4. Geometry/Integrated Math 2	20.3%	55.5%
5. Algebra II/Integrated Math 3	15.1%	59.6%
6. Advanced Math	1.8%	83.7%
Missing/Invalid	20.3%	34.7%
Total	100.0%	45.2%

We also looked at when seniors had taken Algebra I. Table 2.16 shows the grades at which Algebra I was taken and the CAHSEE math passing rate for seniors taking Algebra I at each of these grades. Differences in passing rate are also shown in Figure 2.1. Students who took mathematics earlier in high school appear to have been more prepared to master the required material, particularly in comparison to students who were just taking Algebra I in 12th grade or who had not taken it at all.

Table 2.17 shows how students in different demographic groups differed in whether they had taken Algebra I and courses beyond Algebra I. Interestingly, among students who had not passed the CAHSEE mathematics test by the end of 11th grade, females were more likely to have taken courses beyond Algebra I. Not surprisingly, the striking difference is for students in special education programs, only about a third of whom have taken Geometry or other courses beyond Algebra I.

Table 2.16. Distribution of 12th Graders and Percent Passing Mathematics by When Algebra I was Taken

Highest Mathematics Course Taken	Percent of All 12 th Graders Taking the CAHSEE Math Test	Percent in Category Passing CAHSEE Math
8th Grade	2.4%	72.1%
9th Grade	14.4%	60.6%
10th Grade	10.4%	51.1%
11th Grade	9.6%	43.0%
12th Grade	14.2%	36.3%
Not Taken	13.7%	36.2%
Missing	14.6%	33.6%
Invalid	21.1%	49.9%
Total	100.0%*	45.2%

Note: *Column may not total to 100% due to rounding.

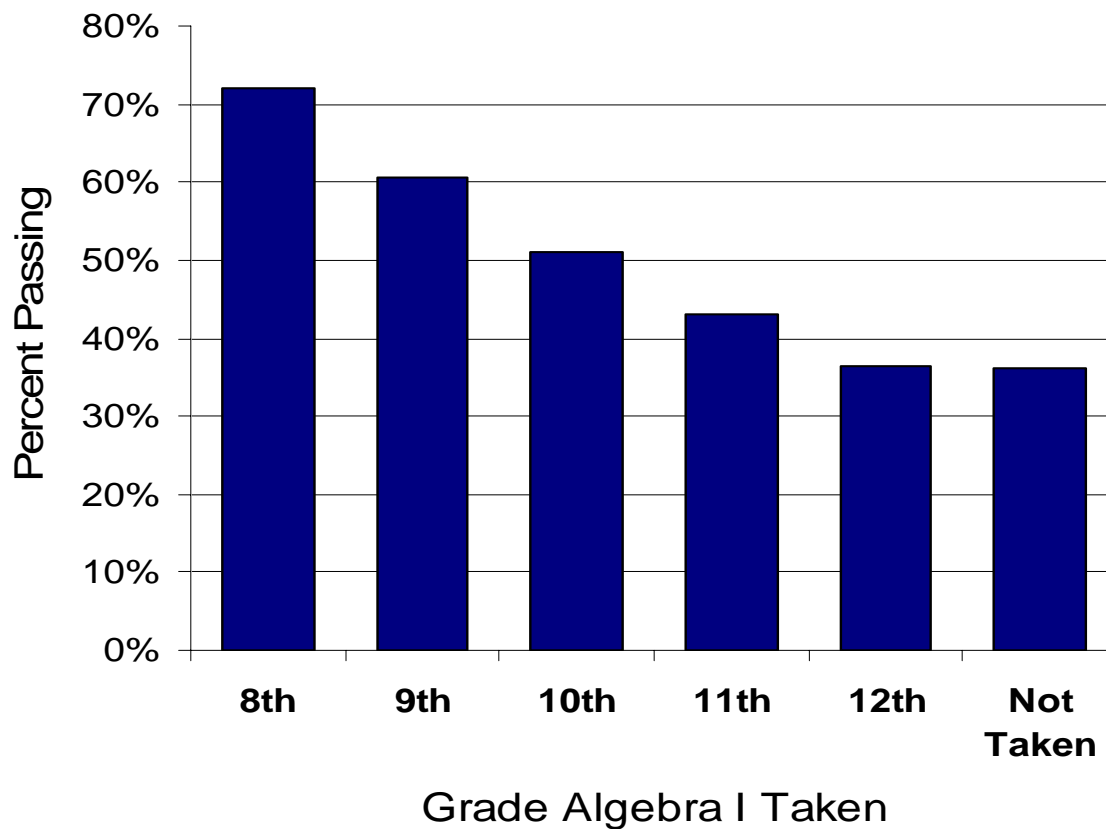
**Figure 2.1. Mathematics passing rates for 12th graders by grade when Algebra I was taken.**

Table 2.17. Percentage of Seniors Taking Algebra I and Mathematics Courses Beyond Algebra I by Demographic Group.

Group	Percent of Students*		
	Not Taking Algebra I	Taking Algebra I Only	Taking Courses Beyond Algebra I
All Students	19.9%	33.9%	46.3%
Females	18.4%	32.2%	49.4%
Males	21.1%	35.4%	43.5%
Asian	14.1%	28.1%	57.8%
Hispanic	20.4%	34.8%	44.7%
African American	16.6%	28.2%	55.2%
White, non-Hispanic	22.4%	36.7%	40.9%
Economically Disadvantaged	19.8%	33.7%	46.5%
English Learner	18.3%	33.1%	48.6%
Special Education	23.0%	40.4%	36.6%

Note: *Rows may not total to 100% due to rounding.

We also looked at responses to two of the student questionnaire items that included information on courses taken. Table 2.18 shows the distribution of 12th grade student responses to questions 9 and 12 on the questionnaire completed after the mathematics test, along with the math passing rates for students selecting each response.

Table 2.18. Distribution of 12th Graders and Percent Passing Mathematics by Responses to Mathematics Questionnaire Items

Student Questionnaire Items and Response Categories	Percent of All 12 th Graders Taking the CAHSEE Math Test	Percent in Category Passing CAHSEE Math
<i>Question 9: Were the topics on the test covered in courses you have taken?</i>		
A. Yes, all of them.	25.5%	52.9%
B. Most (2/3rds or more)	56.5%	45.8%
C. Many topics were not covered	17.8%	34.6%
<i>Question 12: If some topics on the Test were Difficult for you, was it because:</i>		
A. I did not take courses that covered these topics.	20.6%	39.2%
B. I had trouble with these topics in the courses I took.	36.6%	43.1%
C. I have forgotten things I was taught about these topics.	33.3%	51.0%
D. None of the topics was difficult for me.	7.8%	47.8%

In response to question 9, about a quarter of the 12th graders taking the CAHSEE math test said that all of the topics on the test were covered in their courses and 53 percent of the students who gave this responses ended up passing. By contrast, 18 percent said that many topics were not covered and only 35 percent of these students passed. In response to question 12, just over 20 percent of the 12th graders said that they did not take

courses covering topics on the mathematics test and fewer than 40 percent of these students passed. About 37 percent of 12th graders responding to question 12 said that they had trouble with the topics in the courses they took and about 43 percent of these students passed. It should not be surprising that very few students (8 percent) still taking the CAHSEE mathematics test in 12th grade reported that none of the topics were difficult.

We also compared the responses to the student questionnaire items on coverage of test content to their report of mathematics courses taken. Table 2.19 shows the percentage of 12th grade students at different course levels and the percentage of students taking or not taking Algebra I at different times for students selecting each response category on questionnaire items 9 and 12.

Table 2.19. Mathematics Courses Taken by Responses to Mathematics Questionnaire Items

Student Questionnaire Items and Response Categories	Highest Math Course Taken			When Was Algebra I Taken?		
	Less than Algebra I	Algebra I Only	More than Algebra I	Before 12th Grade	During 12th Grade	Have Not Taken Algebra I
Question 9: Were the topics on the test covered in courses you have taken?						
A. Yes, all of them.	15.0%	28.2%	56.7%	62.2%	18.7%	19.0%
B. Most, but not all of them (2/3rds or more)	19.5%	34.4%	46.2%	58.4%	22.5%	19.1%
C. Many topics were not covered	25.5%	37.4%	37.1%	48.0%	23.4%	28.6%
Question 12: If some topics on the Test were difficult for you, was it because:						
A. I did not take courses that covered these topics.	26.0%	38.7%	35.3%	47.5%	25.6%	26.9%
B. Had trouble with topics in the courses I took.	19.0%	34.1%	46.9%	58.4%	22.5%	19.1%
C. Forgot things I was taught about these topics.	16.8%	31.0%	52.2%	61.9%	19.4%	18.8%
D. None of the topics was difficult for me.	15.3%	26.4%	58.3%	59.1%	18.6%	22.3%

Over half of the 12th graders (57%) who said that all of the topics on the CAHSEE mathematics test were covered in their courses had taken courses beyond Algebra I compared to only 37 percent of the students who reported that many topics were not covered in their courses. About 62 percent of the students who said that all of the topics on the math test were covered had completed Algebra I before 12th grade compared to 48 percent of the students who said that many topics were not covered. More than a quarter of the students who said that many topics were not covered had not taken Algebra I at all.

In response to the question of why some of the topics on the mathematics test were difficult (Question 12), 26 percent of the students who said they did not take courses that covered these topics had not taken Algebra I and only 35 percent had taken courses beyond Algebra I. By comparison, only 15 percent of the students who said none of the topics was difficult had yet to take Algebra I and 58 percent had taken courses beyond Algebra I.

A discussion of responses to some of the other student questionnaire items is provided later in this chapter. More complete information on questionnaire item responses is provided in Appendix III. Chapter 4 contains information on the characteristics and successes of 12th graders in special populations (English learners and students with disabilities). We turn now to results for 11th graders in the Class of 2007.

Class of 2007 – Improvement for Students Who Retested

We analyzed the number of 11th grade students (Class of 2007) who passed each part of the CAHSEE and the number completing the requirement to pass both parts and added these to the corresponding numbers for last year's 10th graders. Students shown as 11th graders in the 2005–06 CAHSEE administrations included some students who were repeating 11th grade, thus moving from the Class of 2006 cohort last year to the Class of 2007 Cohort. This year's 11th graders also included some students new to the state and other students who were 9th graders in 2005. Students who repeated the 10th grade were dropped from the Class of 2007 cohort as were students who did not pass in 2005 and failed to test at all during the 2005–06 school year. The net of these differences was that the estimated number of students in the Class of 2007 increased from about 471,000 at the end of 10th grade to 475,000 at the end of 11th grade. Therefore, when we computed passing rates using the revised base, they were lower than they would have been if 10th grade counts, based on a smaller number of students, had been used.

Tables 2.20 through 2.22 show the estimated number of students in the Class of 2007 passing the ELA test, the mathematics test, and both tests respectively. Table 2.23 compares the 11th grade passing rates for the Class of 2007 with the 11th grade passing rates for the Class of 2006 estimated last year. The results are very similar. Last year we reported a slight increase in 10th grade passing rates for the Class of 2007 compared to the Class of 2006 — one to two percentage points higher. By the end of 11th grade the differences virtually disappear.

Table 2.20. Estimated Number and Percent of Students in the Class of 2007 Passing the CAHSEE ELA Test through 11th Grade

Passed ELA Group	Number of Students*				Percent of Students		
	Grade 10	Grade 11	Not Yet	Total	Grade 10	Grade 11	Total Passed
All Students	348,020	56,047	70,745	474,812	73.3%	11.8%	85.1%
Females	180,655	24,987	27,347	232,989	77.5%	10.7%	88.3%
Males	166,286	30,961	43,588	240,835	69.0%	12.9%	81.9%
Asian	36,316	3,776	3,994	44,086	82.4%	8.6%	90.9%
Hispanic	120,369	27,847	43,613	191,829	62.7%	14.5%	77.3%
African American	24,052	6,509	9,134	39,695	60.6%	16.4%	77.0%
White, non-Hispanic	144,104	14,361	10,350	168,815	85.4%	8.5%	93.9%
Economically Disadvantaged	119,737	28,225	46,063	194,025	61.7%	14.5%	76.3%
English Learner	34,110	15,701	32,612	82,423	41.4%	19.0%	60.4%
Special Education	13,357	6,321	22,656	42,334	31.6%	14.9%	46.5%

* Students with missing demographic information are excluded from counts by gender or race/ethnicity.

Table 2.21. Estimated Number and Percent of Students in the Class of 2007 Passing the CAHSEE Mathematics Test through 11th Grade

Passed Math		Number of Students*			Percent of Students		
Group	Grade 10	Grade 11	Not Yet	Total	Grade 10	Grade 11	Total Passed
All Students	337,376	58,749	78,687	474,812	71.1%	12.4%	83.4%
Females	167,697	28,593	36,699	232,989	72.0%	12.3%	84.2%
Males	169,205	30,045	41,585	240,835	70.3%	12.5%	82.7%
Asian	38,578	3,324	2,184	44,086	87.5%	7.5%	95.0%
Hispanic	115,615	30,045	46,169	191,829	60.3%	15.7%	75.9%
African American	20,538	6,568	12,589	39,695	51.7%	16.5%	68.3%
White, non-Hispanic	140,368	15,146	13,301	168,815	83.1%	9.0%	92.1%
Economically Disadvantaged	116,930	29,224	47,871	194,025	60.3%	15.1%	75.3%
English Learner	38,519	16,040	27,864	82,423	46.7%	19.5%	66.2%
Special Education	12,304	5,468	24,562	42,334	29.1%	12.9%	42.0%

* Students with missing demographic information are excluded from counts by gender or race/ethnicity.

Table 2.22. Estimated Number and Percent of Students in the Class of 2007 Passing Both CAHSEE Tests through 11th Grade

Passed Both		Number of Students*			Percent of Students		
Group	Grade 10	Grade 11	Not Yet	Total	Grade 10	Grade 11	Total Passed
All Students	307,963	65,741	101,108	474,812	64.9%	13.8%	78.7%
Females	156,919	31,229	44,841	232,989	67.4%	13.4%	80.8%
Males	150,226	34,395	56,214	240,835	62.4%	14.3%	76.7%
Asian	35,227	4,202	4,657	44,086	79.9%	9.5%	89.4%
Hispanic	99,242	32,417	60,170	191,829	51.7%	16.9%	68.6%
African American	18,328	7,104	14,263	39,695	46.2%	17.9%	64.1%
White, non-Hispanic	134,251	17,894	16,670	168,815	79.5%	10.6%	90.1%
Economically Disadvantaged	99,037	32,223	62,765	194,025	51.0%	16.6%	67.7%
English Learner	25,982	16,427	40,014	82,423	31.5%	19.9%	51.5%
Special Education	8,621	5,558	28,155	42,334	20.4%	13.1%	33.5%

* Students with missing demographic information are excluded from counts by gender or race/ethnicity.

Table 2.23. Estimated Passing Rates for Classes of 2006 and 2007 After 11th Grade

Group	Number of Students*		Percent Passing ELA		Percent Passing Math		Percent Passing Both	
	Class of 2006**	Class of 2007	Class of 2006	Class of 2007	Class of 2006	Class of 2007	Class of 2006	Class of 2007
All Students	462,973	474,812	84.6%	85.1%	83.6%	83.4%	78.4%	78.7%
Females	227,436	232,989	87.7%	88.3%	84.4%	84.2%	80.5%	80.8%
Males	235,341	240,835	81.7%	81.9%	82.9%	82.7%	76.4%	76.7%
Asian	44,009	44,086	90.8%	90.9%	95.1%	95.0%	89.3%	89.4%
Hispanic	185,972	191,829	76.0%	77.3%	75.6%	75.9%	67.5%	68.6%
African American	37,644	39,695	75.9%	77.0%	68.2%	68.3%	63.2%	64.1%
White, non-Hispanic	168,866	168,815	94.0%	93.9%	92.5%	92.1%	90.4%	90.1%
Economically Disadvantaged	183,077	194,025	74.7%	76.3%	74.9%	75.3%	66.3%	67.7%
English Learner	81,817	82,423	59.4%	60.4%	67.1%	66.2%	51.1%	51.5%
Special Education	41,335	42,334	48.0%	46.5%	45.2%	42.0%	35.5%	33.5%

* Passing rates are based on students who have passed in the 10th grade or who were still taking the exam as 11th graders. Estimates are only approximate because of difficulties in matching 10th and 11th grade results. Unmatched 11th graders who took only one of the two tests were assumed to have passed the other in 10th grade; those who took both tests were assumed to have passed neither in 10th grade.

** Special education students in the Class of 2006 who did not pass by the end of 11th grade are included here for comparison to the Class of 2007 results, but were excluded from Tables 2.12 through 2.14 above.

Last year's report included more extensive analyses of 11th grade gains for the Class of 2006. Given the similarity in the 11th grade results for the Class of 2007, we did not invest resources in replicating those analyses. Further analyses of 11th grade results for special populations are included in Chapter 4. We turn now to results for 10th graders in the Class of 2008.

Class of 2008 — Initial Passing Rates for 10th Graders

A major charge for the independent evaluation was to analyze and report performance on the CAHSEE for all students and for specific demographic groups, including economically disadvantaged students, English learners (EL), and students with disabilities (characterized as “exceptional needs students” in the legislation). Table 2.24 shows the 10th grade CAHSEE completion rates (passing both parts) for the Classes of 2005 through 2008. Passing rates for the Class of 2005 have been adjusted to reflect changes to the test introduced in 2004 when the exam was restarted for the Class of 2006. The 10th grade results are based on a census testing of all students. Students in the Class of 2004 took the CAHSEE in the 9th or 10th grade, but not all at one time, so that census data are not available for that class.

Tables 2.25 and 2.26 show comparative passing rates for the ELA and Mathematics tests separately. Note that we used all students in the denominator, including students who were absent or did not take one or both parts of the CAHSEE for some other reason. In

addition, students taking a test with modifications are counted as not passing. The numbers reported here are closer to exact counts because matching to prior year records was not required. CDE has reported passing rates based just on students who actually took a particular test, excluding students receiving test modifications. We are estimating passing rates for the class as a whole, while CDE estimates passing rates for those actually testing.

Table 2.24. Percent of 10th Grade Students Passing Both Parts of the CAHSEE by Demographic Group.

Group	Students Tested				Percent Passing			
	Class of 2005	Class of 2006	Class of 2007	Class of 2008	Class of 2005*	Class of 2006	Class of 2007	Class of 2008
All Students	425,066	459,138	470,891	505,045	59.3%	64.3%	65.4%	65.1%
Females	207,619	224,766	230,425	246,680	61.4%	67.1%	68.1%	67.9%
Males	216,708	233,964	239,214	258,200	57.3%	61.7%	62.8%	62.4%
Native American	3,717	4,227	4,270	4,712	55.6%	59.9%	59.6%	61.0%
Asian	38,635	42,588	42,699	43,636	77.7%	81.5%	82.5%	82.5%
Pacific Islander	2,832	3,107	3,299	3,499	56.0%	60.4%	63.4%	62.9%
Filipino	12,475	13,349	13,592	14,416	76.3%	80.8%	81.3%	81.3%
Hispanic	169,704	188,494	194,211	219,176	42.5%	49.0%	51.1%	52.4%
African American	34,619	37,287	39,501	42,557	39.5%	45.3%	46.4%	46.3%
White (not Hispanic)	157,498	165,613	164,927	171,775	76.5%	80.7%	81.4%	80.5%
Economically Disadvantaged	167,869	186,411	197,678	219,280	41.3%	47.7%	50.1%	50.8%
English Learners	72,038	83,728	84,358	83,568	24.1%	29.6%	30.8%	27.0%
Reclassified Fluent English	45,320	49,067	53,323	72,986	66.7%	76.3%	78.6%	78.1%
Special Education Students	36,448	42,516	42,677	50,958	19.9%	18.8%	20.2%	20.9%

*Note. Passing rates for the Class of 2005 were adjusted to reflect the new scale. The numbers shown here are estimates of the number of students in each category who would have passed had they taken the revised form of the CAHSEE that was first used with the Class of 2006.

Table 2.25. Initial 10th Grade Passing Rates by Demographic Group—English-Language Arts

Group	Students Tested				Percent Passing			
	Class of 2005	Class of 2006	Class of 2007	Class of 2008	Class of 2005*	Class of 2006	Class of 2007	Class of 2008
All Students	425,066	459,138	470,891	505,045	71.6%	72.9%	74.8%	73.4%
Females	207,619	224,766	230,425	246,680	76.2%	77.4%	79.5%	78.1%
Males	216,708	233,964	239,214	258,200	67.2%	68.7%	70.2%	69.0%
Native American	3,717	4,227	4,270	4,712	70.1%	70.9%	70.8%	71.6%
Asian	38,635	42,588	42,699	43,636	82.0%	84.1%	85.2%	85.0%
Pacific Islander	2,832	3,107	3,299	3,499	69.9%	69.3%	73.5%	72.3%
Filipino	12,475	13,349	13,592	14,416	85.3%	86.3%	87.3%	86.7%
Hispanic	169,704	188,494	194,211	219,176	57.8%	59.8%	63.2%	62.8%
African American	34,619	37,287	39,501	42,557	59.9%	60.1%	62.1%	60.6%
White (not Hispanic)	157,498	165,613	164,927	171,775	85.9%	87.0%	88.0%	86.4%
Economically Disadvantaged	167,869	186,411	197,678	219,280	55.7%	58.1%	61.8%	61.1%
English Learners	72,038	83,728	84,358	83,568	34.9%	38.0%	41.3%	35.8%
Reclassified Fluent English	45,320	49,067	53,323	72,986	80.4%	85.2%	87.9%	86.5%
Special Education Students	36,448	42,516	42,677	50,958	32.2%	28.8%	31.5%	31.6%

*Note. Passing rates for the Class of 2005 were adjusted to reflect the new scale. The numbers shown here are estimates of the number of students in each category who would have passed had they taken the revised form of the CAHSEE that was first used with the Class of 2006.

Table 2.26. Initial 10th Grade Passing Rates by Demographic Group—Mathematics

Group	Students Tested				Percent Passing			
	Class of 2005	Class of 2006	Class of 2007	Class of 2008	Class of 2005*	Class of 2006	Class of 2007	Class of 2008
All Students	425,066	459,138	470,891	505,045	66.1%	71.8%	72.1%	71.7%
Females	207,619	224,766	230,425	246,680	66.6%	72.8%	73.1%	72.8%
Males	216,708	233,964	239,214	258,200	65.6%	70.8%	71.3%	70.7%
Native American	3,717	4,227	4,270	4,712	62.5%	66.3%	66.3%	67.1%
Asian	38,635	42,588	42,699	43,636	86.9%	90.5%	90.9%	90.0%
Pacific Islander	2,832	3,107	3,299	3,499	63.3%	69.5%	70.4%	69.9%
Filipino	12,475	13,349	13,592	14,416	80.8%	86.0%	85.8%	85.6%
Hispanic	169,704	188,494	194,211	219,176	51.1%	59.2%	60.2%	61.5%
African American	34,619	37,287	39,105	42,557	44.6%	51.9%	52.5%	52.3%
White (not Hispanic)	157,498	165,613	164,927	171,775	81.3%	85.0%	85.4%	84.1%
Economically Disadvantaged	167,869	186,411	197,678	219,280	50.9%	58.6%	59.9%	60.4%
English Learners	72,038	83,728	84,358	83,568	39.1%	47.6%	47.0%	44.3%
Reclassified Fluent English	45,320	49,067	53,323	72,986	72.6%	81.9%	83.4%	82.9%
Special Education Students	36,448	42,516	42,677	50,958	26.6%	27.8%	28.6%	28.4%

*Note. Passing rates for the Class of 2005 were adjusted to reflect the new scale. The numbers shown here are estimates of the number of students in each category who would have passed had they taken the revised form of the CAHSEE that was first used with the Class of 2006.

Figure 2.2 shows the trend in passing rates for the CAHSEE as a whole and for the ELA and Mathematics test separately. Figure 2.3 displays trends in the overall 10th grade passing rates for demographic groups that have had particular difficulties in passing the CAHSEE. As illustrated by these charts, 10th grade passing rates have not changed much, either up or down, over the last three years.

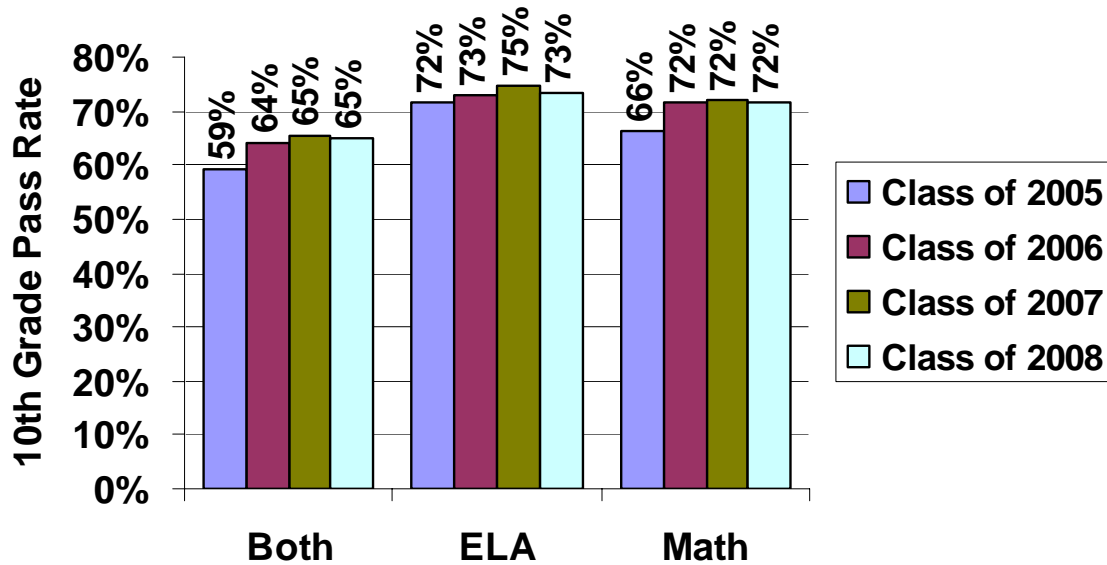


Figure 2.2. Trends in 10th grade CAHSEE passing rates

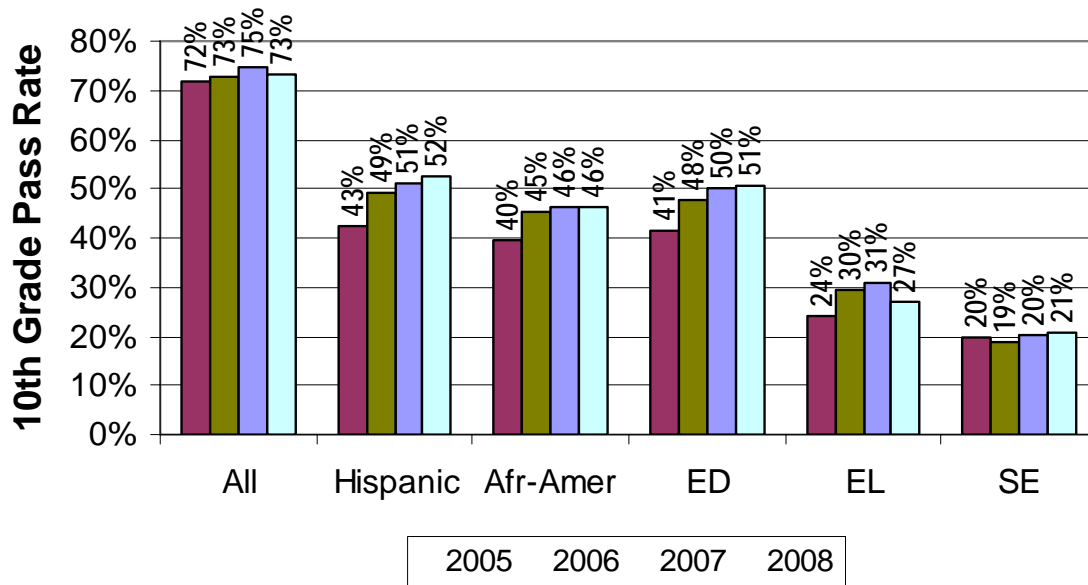


Figure 2.3. Trends in overall passing rates for selected groups

The results by race and ethnicity were confounded to some extent due to interactions of race and ethnicity with other demographic characteristics. In particular, a higher proportion of Hispanic students were in special education, a higher proportion of African American and Hispanic students were economically disadvantaged compared to White students, and a higher proportion of Hispanic students were English learners. We further analyzed test results to show separate race/ethnicity results within different types

of disadvantages, as shown in Table 2.27. The first three categories include students with a single type of disadvantage only, special education, English learner, or economically disadvantaged. The next four categories include various combinations of these conditions and the final category includes students for whom none of these conditions apply.

Table 2.27. Initial 10th Grade Passing Rates by Student Category and Race/Ethnicity

Student Category	Race / Ethnicity	Number of Students			Percent Passing ELA			Percent Passing Math		
		2006	2007	2008	2006	2007	2008	2006	2007	2008
Students with Disabilities (SD) Students Only ¹	Asian	492	447	712	62.4%	57.7%	60.7%	63.6%	61.5%	58.3%
	African American	2,495	2,513	2,765	19.7%	24.8%	24.8%	15.4%	16.9%	18.1%
	Hispanic	4,280	4,170	5,011	31.9%	35.1%	37.6%	28.8%	30.8%	32.1%
	White	11,044	10,580	12,556	52.4%	55.4%	53.0%	49.4%	50.5%	46.9%
English Learners (EL) Only	Asian	3,490	3,111	2,819	61.6%	62.1%	57.1%	85.7%	86.1%	83.6%
	Hispanic	10,899	10,509	10,627	40.3%	43.6%	38.9%	45.7%	43.8%	42.9%
	White	1,037	995	835	63.0%	63.0%	62.0%	71.8%	72.4%	70.3%
Economically Disadvantaged (ED) Only	Asian	8,974	10,402	10,469	91.8%	92.6%	92.3%	93.1%	93.5%	92.9%
	African American	13,056	14,539	15,940	61.4%	63.2%	63.9%	51.8%	52.3%	54.2%
	Hispanic	62,033	66,225	82,805	75.6%	79.0%	78.8%	70.4%	72.2%	73.9%
	White	18,732	19,959	21,335	80.2%	81.6%	80.1%	76.4%	77.2%	76.1%
SD and EL, (Not ED)	Hispanic	1,663	1,482	1,789	12.2%	16.4%	13.9%	14.2%	15.4%	15.2%
SD and ED (Not EL)	African American	3,323	3,536	4,176	13.4%	16.3%	16.6%	10.2%	10.9%	11.1%
	Hispanic	5,817	5,856	7,066	20.2%	24.1%	28.3%	19.9%	21.0%	25.4%
	White	3,656	3,733	4,455	29.2%	32.9%	31.7%	26.6%	29.4%	26.5%
EL and ED Only (Not SD)	Asian	6,149	6,025	5,260	50.1%	52.5%	47.8%	75.6%	76.6%	72.3%
	Hispanic	48,448	49,779	48,514	38.2%	42.4%	37.1%	46.5%	46.3%	45.1%
	White	1,578	1,476	1,130	51.5%	56.0%	46.7%	69.6%	69.2%	65.2%
SD, EL, and ED	Asian	512	533	551	15.6%	14.8%	14.9%	29.5%	28.3%	25.2%
	Hispanic	6,677	7,110	8,813	9.0%	12.4%	11.2%	12.1%	13.4%	14.2%
All Other Students (No Disadvantages)	Asian	22,545	21,748	23,264	96.8%	97.4%	97.0%	97.0%	97.3%	97.1%
	African American	18,025	18,497	19,223	73.8%	75.8%	73.1%	64.8%	65.7%	64.8%
	Hispanic	48,631	49,080	54,551	81.7%	83.1%	82.7%	76.2%	76.7%	77.3%
	White	129,255	127,941	131,158	93.3%	94.0%	93.1%	91.4%	91.7%	91.3%

Note. Race categories with fewer than 300 students for a particular student category are omitted.

In general, passing rates are lower for students with more than one disadvantage. Note that Hispanic and particularly African American students have significantly lower passing rates within each specific category. Gaps in passing rates by race and ethnicity were smaller for students who were not disadvantaged than they

were when all students in each race/ethnicity category were included. More striking, however, was the extent of race/ethnicity differences among students receiving special education services. Passing rates for the ELA test were twice as high for Asian and White students in this category as they were for African American or Hispanic students. *For math, the passing rate for students receiving special education services who were White or Asian was more than twice as high as for students receiving special education services who were Hispanic and more than three times as high as the passing rate for students receiving special education services who were African American.*

Further analyses of results for English learners and students with disabilities are presented in chapter 4.

Analysis of Results by Mathematics Courses Taken

We analyzed passing rates on the mathematics part of the CAHSEE for students who had completed different levels of math courses. Table 2.28 shows the distribution of the highest level of mathematics course completed by students in the Class of 2008 compared to students in the classes of 2006 and 2007. Table 2.29 shows the percentage of students in key demographic groups who have not yet taken Algebra I (well below expectation at grade 10) and the percentage that have taken courses beyond Algebra I (meets expectation at grade 10). Students following the expected curriculum would be taking at least geometry by the 10th grade. Table 2.30 shows the CAHSEE mathematics passing rates for students at each course level.

Table 2.28. Distribution of Students by Highest Math Course Taken

Highest Math Course Taken	Percentage of 10 th Grade Students*			
	Class of 2005	Class of 2006	Class of 2007	Class of 2008
General Math	3.0%	2.6%	2.0%	1.9%
Pre-Algebra	11.5%	11.1%	9.9%	11.7%
Algebra I	26.9%	26.9%	24.4%	18.6%
Integrated Math I	0.7%	0.6%	0.5%	0.3%
Integrated Math II	1.2%	0.9%	0.7%	0.8%
Geometry	29.8%	30.1%	31.0%	33.5%
Algebra II	17.5%	18.4%	17.9%	20.4%
Advanced Math	1.9%	2.2%	2.5%	2.7%
Unknown	7.7%	7.2%	10.1%	10.3%
No. of Students	414,903	450,928	470,891	502,874

* Note: Column percents may not add to 100 percent due to rounding.

Table 2.29. Trends in Math Courses Taken by Demographic Group

Group	Percent of 10 th Graders Not Yet Taking Algebra I				Percent of 10 th Graders Taking Math Courses Beyond Algebra I			
	Class of 2005	Class of 2006	Class of 2007	Class of 2008	Class of 2005	Class of 2006	Class of 2007	Class of 2008
All Students	15.6%	14.8%	13.2%	15.3%	54.6%	55.6%	59.6%	64.0%
Females	14.2%	13.5%	12.0%	14.1%	57.8%	59.1%	62.9%	67.1%
Males	17.0%	16.2%	14.4%	16.4%	51.5%	52.2%	56.5%	61.0%
Native American	6.9%	5.5%	4.9%	5.7%	78.7%	80.6%	83.8%	85.1%
Asian	19.6%	18.8%	16.2%	18.2%	42.0%	43.4%	49.2%	56.3%
Pacific Islander	17.9%	17.1%	15.1%	17.9%	48.6%	48.6%	53.4%	58.4%
Filipino	13.5%	12.8%	11.8%	13.8%	62.0%	63.1%	65.8%	68.8%
Hispanic	19.5%	18.6%	15.9%	17.8%	43.4%	44.9%	51.1%	57.2%
African American	21.5%	20.3%	17.4%	20.2%	33.8%	36.8%	42.8%	46.1%
White (not Hispanic)	37.3%	34.6%	29.6%	27.3%	19.5%	19.0%	24.3%	33.3%
Economically Disadvantaged (Original Definition)	15.6%	14.8%	13.2%	15.3%	54.6%	55.6%	59.6%	64.0%
Economically Disadvantaged (New Definition)	14.2%	13.5%	12.0%	14.1%	57.8%	59.1%	62.9%	67.1%
English Learners	17.0%	16.2%	14.4%	16.4%	51.5%	52.2%	56.5%	61.0%
Reclassified Fluent English	6.9%	5.5%	4.9%	5.7%	78.7%	80.6%	83.8%	85.1%
Special Education Students	19.6%	18.8%	16.2%	18.2%	42.0%	43.4%	49.2%	56.3%

Note. Students whose highest mathematics course was unknown were excluded from this table.

Table 2.30. Initial Mathematics Passing Rates by Class and Highest Math Course Taken

Highest Math Course Taken	Class of 2006	Class of 2007	Class of 2008
General Math	31.2%	31.0%	35.9%
Pre-Algebra	53.8%	54.8%	57.0%
Algebra I	57.7%	57.1%	53.1%
Integrated Math I	75.4%	75.6%	72.7%
Integrated Math II	90.0%	90.4%	84.7%
Geometry	87.1%	85.0%	81.2%
Algebra II	95.3%	96.0%	91.9%
Advanced Math	99.4%	99.5%	96.4%
Unknown	50.0%	41.2%	49.0%
All Students	71.8%	72.1%	71.6%

Passing rates rose slightly for student who reported having not yet taken Algebra I, from 31 percent to 36 percent for General Math and 55 percent to 57 percent for Pre-Algebra. Rates for students taking courses beyond Algebra I dropped three to five percentage points leading to a net drop of half a percentage point in the overall passing rate. The clear differences among between students taking only General Math, students taking Algebra I, and students taking courses beyond Algebra I remain.

School-Level Effects

A key question now being debated in the courts is whether schools vary significantly in their effectiveness in preparing students to pass the CAHSEE. It is, of course, difficult to separate school-level effects of curriculum and instruction from effects associated with differences in the type and preparation of students served. In this section, we first examine differences in passing rates for targeted groups of disadvantaged students by the density of these students within the school. Then we turn to statistical models to examine student, school, and district differences in CAHSEE passing rates and achievement gains over time while controlling for other variables in each of the three levels.

Difference in School-Level Passing Rates

Table 2.31 shows the percentage of schools with very low (0–50%), low (> 50–75%), moderate (>75–90%), and high (> 90%) ELA passing rates for schools with different concentrations of minority or at-risk students. Passing rates were not computed for schools with fewer than 10 students in the targeted group and these schools were excluded. Table 2.32 shows the equivalent results for mathematics. With the possible exception of ELA passing rates for English Learners, students in schools with high concentrations of at-risk students are far less likely to pass the CAHSEE.

Table 2.31. 2006 10th Grade ELA Passing Rates for Schools with Different Concentrations of Minority or At-Risk Students*

School Category	Number of Schools	Percent of Schools at Each Passing Level			
		Very Low (0–50%)	Low (>50–75%)	Moderate (>75–90%)	High (> 90%)
Passing Rates for All Students					
All Schools	1892	31.0%	30.6%	27.9%	10.6%
Passing Rates for Hispanic Students					
Low Hispanic (0–20%)	259	5.8%	33.2%	45.6%	15.4%
Moderate Hispanic (>20–60%)	709	29.3%	52.5%	15.1%	3.1%
High Hispanic (> 60%)	459	42.7%	48.6%	7.4%	1.3%
Passing Rate for African American Students					
Low African Amer. (0–4%)	157	8.9%	35.7%	39.5%	15.9%
Moderate African Amer. (>4–12%)	257	13.6%	51.4%	28.8%	6.2%
High African Amer. (> 12%)	377	45.1%	40.1%	10.9%	4.0%
Passing Rate for Economically Disadvantaged Students					
Low Economically Disadvantaged (0–20%)	228	4.8%	48.3%	39.5%	7.5%
Moderate Economically Disadvantaged (>20–60%)	674	25.8%	60.7%	10.7%	2.8%
High Economically Disadvantaged (> 60%)	611	49.3%	41.9%	7.4%	1.5%
Passing Rate for English Learners					
Low EL (0–10%)	246	67.5%	28.5%	3.7%	0.4%
Moderate EL (>10–33%)	496	86.5%	12.5%	0.8%	0.2%
High EL (> 33%)	216	89.4%	9.3%	1.4%	0.0%
Passing Rate for Students Receiving Special Education Services					
Low SD (0–8%)	235	74.5%	20.9%	4.3%	0.4%
Moderate SD (>8–12%)	440	85.0%	13.2%	1.8%	0.0%
High SD (>12%)	332	88.9%	9.0%	1.5%	0.6%

* Schools with fewer than 10 students in the indicated category were excluded.

Table 2.32. 2006 10th Grade Mathematics Passing Rates for Schools with Different Concentrations of Minority or At-Risk Students*

School Category	Number of Schools	Percent of Schools at Each Passing Level			
		Very Low (0–50%)	Low (>50–75%)	Moderate (>75–90%)	High (> 90%)
Passing Rates for All Students					
All Schools	1892	36.6%	29.0%	25.6%	8.9%
Passing Rates for Hispanic Students					
Low Hispanic (0–20%)	259	6.6%	35.9%	46.0%	11.6%
Moderate Hispanic (>20–60%)	709	35.1%	47.7%	15.2%	2.0%
High Hispanic (> 60%)	459	48.4%	41.8%	9.2%	0.7%
Passing Rate for African American Students					
Low African Amer. (0–4%)	157	14.0%	50.3%	24.2%	11.5%
Moderate African Amer. (>4–12%)	257	23.0%	56.8%	16.3%	3.9%
High African Amer. (> 12%)	377	60.0%	32.1%	5.8%	2.1%
Passing Rate for Economically Disadvantaged Students					
Low Economically Disadvantaged (0–20%)	228	6.6%	50.0%	36.8%	6.6%
Moderate Economically Disadvantaged (>20–60%)	674	28.6%	56.7%	12.0%	2.7%
High Economically Disadvantaged (> 60%)	611	55.2%	35.0%	8.4%	1.5%
Passing Rate for English Learners					
Low EL (0–10%)	246	41.5%	41.9%	10.2%	6.5%
Moderate EL (>10–33%)	496	66.7%	30.0%	2.8%	0.4%
High EL (> 33%)	216	69.9%	25.9%	4.2%	0.0%
Passing Rate for Students Receiving Special Education Services					
Low SD (0–8%)	235	81.7%	15.3%	2.6%	0.4%
Moderate SD (>8–12%)	440	89.8%	9.6%	0.7%	0.0%
High SD (>12%)	332	90.4%	8.7%	0.6%	0.3%

* Schools with fewer than 10 students in the indicated category were excluded.

As a result of the Williams Case (Williams v. California), about 2000 low-performing schools are being monitored, including just over 300 high schools. The schools being monitored were in the lowest three deciles (essentially below the 30th percentile) on the 2003 Academic Performance Index (API). Table 2.33 shows how these low-performing schools compared to all other schools in terms of CAHSEE passing rates for different groups of students. Differences at the low end were not consistent. In some cases a greater proportion of the non-Williams schools were in the very low passing rate category. At the top end, however, the Williams schools were consistently less likely to have moderate to high passing rates for each of the student groups analyzed.

Table 2.33. 2006 10th Grade Passing Rates for Low-Performing Schools*

		Percentage of Schools at Each 10 th Grade Passing Level							
Student Category	School Type	Very Low (0-50%)		Low (>50-75%)		Moderate (>75-90%)		High (> 90%)	
		2005	2006	2005	2006	2005	2006	2005	2006
English Language Arts									
All Students	Williams	18.1%	19.3%	70.3%	66.9%	11.0%	13.2%	0.6%	0.6%
	Other	40.2%	37.5%	20.5%	24.7%	24.9%	25.4%	14.6%	12.4%
Hispanic Students	Williams	23.9%	20.3%	70.4%	71.6%	4.1%	6.9%	1.6%	1.3%
	Other	45.2%	40.0%	30.1%	33.2%	13.7%	15.4%	13.0%	11.4%
African American Students	Williams	34.1%	29.8%	49.5%	46.7%	7.3%	13.2%	9.1%	10.4%
	Other	40.0%	36.6%	23.0%	26.3%	14.8%	16.8%	22.2%	20.4%
Economically Disadvantaged	Williams	25.2%	21.4%	68.9%	72.5%	3.4%	5.0%	2.5%	1.2%
	Other	45.4%	40.5%	34.7%	37.6%	10.9%	12.4%	9.0%	9.6%
English Learners	Williams	82.8%	85.7%	15.5%	11.6%	0.7%	0.7%	1.0%	2.0%
	Other	76.2%	74.9%	15.5%	17.8%	1.9%	2.0%	6.4%	5.3%
Students with Disabilities	Williams	97.4%	91.4%	1.3%	5.4%	0.0%	0.6%	1.3%	2.6%
	Other	79.6%	73.3%	11.8%	16.7%	2.0%	2.7%	6.6%	7.4%
Mathematics									
All Students	Williams	28.2%	25.8%	65.0%	64.1%	6.8%	10.1%	0.0%	0.0%
	Other	47.9%	44.6%	19.1%	21.9%	22.2%	23.0%	10.8%	10.5%
Hispanic Students	Williams	36.2%	29.7%	58.2%	59.7%	5.0%	10.0%	0.6%	0.6%
	Other	51.3%	44.3%	26.6%	31.0%	13.3%	15.3%	8.8%	9.5%
African American Students	Williams	59.6%	46.7%	31.0%	39.1%	2.4%	5.5%	7.0%	8.7%
	Other	49.8%	45.3%	24.0%	27.4%	11.1%	12.0%	15.1%	15.3%
Economically Disadvantaged	Williams	33.8%	27.6%	61.9%	65.0%	3.1%	6.8%	1.2%	0.6%
	Other	52.6%	45.9%	30.0%	34.3%	10.6%	12.5%	6.8%	7.2%
English Learners	Williams	72.1%	72.1%	22.8%	23.5%	1.7%	2.4%	3.4%	2.0%
	Other	65.2%	61.9%	21.8%	25.8%	5.4%	4.8%	7.5%	7.6%
Students with Disabilities	Williams	97.4%	92.0%	1.3%	6.1%	0.0%	0.3%	1.3%	1.6%
	Other	79.6%	80.2%	11.8%	12.8%	2.0%	1.6%	6.6%	5.4%

Note. The Williams case involved tracking the lowest-performing schools. The schools being monitored were those in the lowest three deciles based on 2003 Academic Performance Index (API) values. This table compares CAHSEE results for 326 Williams high schools and 2009 other high schools (essentially the top seven deciles).

Statistical Analysis of School and District Effects

The purpose of these statistical analyses was to examine the relationship of student, school, and district characteristics to improvement on the CAHSEE reading and mathematics test from the 10th to 12th grade, for students who have had difficulty passing these tests. We used hierarchical linear modeling (HLM; Raudenbush & Bryk,

2002) as a statistical technique to identify factors related to variation of achievement scores at three levels: (1) individual student scores over time (within student), (2) variation among students in each school (across students, within school) and variation across schools and districts (across schools and districts).

Brief Introduction to Hierarchical Linear Modeling (HLM)

Hierarchical linear modeling (HLM) allows analysis of multiple-level data, with lower levels (e.g., students) nested within higher levels (e.g., schools). The analysis involved cross-year data with occasions (scores at different grades) nested within students and students nested within school/district. We examined the relations between the criterion variables of interest (e.g., the 2004–2006 CAHSEE ELA and mathematics scores) and variables describing characteristics of the students (e.g., gender, ethnicity, language-proficiency levels, etc.) and variables describing characteristics of the schools (e.g., different type of school such as Title 1 school, largest ethnicity group, free-meal percentage, and school financial resources of books and supplies, etc.). At each level, explanatory (predictor) variables are examined to determine the extent to which variation in scores is related to each explanatory variable, after effects of the other variables are controlled. The analysis included (a) a time variable as the first level predictor so that effects on growth as well as level could be analyzed, (b) student variables as the second level predictors, and (c) school/district variables as the third level predictors to evaluate both the level and growth of achievement of ELA and math tests scores across the 2004–2006 school years.

Data

The data used for the HLM analyses included two levels beyond test year: student and school. We used HLM to examine the degree of variation in scores at each level and to explore the relationship between the predictors at each level and the CAHSEE score. We specifically examined the score gains between the last time the students took the test in the 2003–2004 school year (referred hereafter as the “2004 Score”), the last time the students took the CAHSEE in the 2004–05 school year (the “2005” Score), and the last time they retaken the test in Year 2005–2006 (the “2006 Score”). Tables 2.34 and 2.35 provide descriptive statistics for ELA and mathematics scores respectively for each of the student-level variables in the HLM analyses.

Student and School Characteristics Studied

A brief description of the student-level variable is listed in Table 2.36. The school-level demographic variables and fiscal variables are from the Web site Education Data Partnership (Ed-Data) (located at <http://www.ed-data.k12.ca.us>). Table 2.37 illustrates a brief description of the school-level variables as provided by the Ed-Data Web site.

Table 2.34. Descriptive Statistics for Student Scores in 2004, 2005, and 2006 and 2004–2005 Score Gains and 2005–2006 Score Gains on the CAHSEE ELA Test by Student-Level Variables

Student Groups	N	Percent ¹	2004 Score		2005 Score		2006 Score		2004–2005 Gain Score		2005–2006 Gain Score	
			Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
All Students	57502	100%	327.7	23.6	330.7	23.5	342.2	33.7	9.8	18.6	13.6	21.7
Gender												
Females	23789	41.4%	331.9	24.1	334.3	23.2	348.7	33.4	10.7	17.6	13.7	20.0
Males	33542	58.3%	323.7	22.4	327.8	23.4	342.0	34.5	9.1	19.3	13.5	22.9
Ethnicity												
Native American	554	0.9%	329.0	24.1	330.9	25.8	347.5	35.9	8.4	18.6	17.4	29.2
Asian	3842	6.7%	323.4	20.2	328.4	20.2	348.2	33.0	9.7	16.9	16.5	20.3
Pacific Islander	521	0.9%	328.9	22.4	332.1	22.7	348.2	32.1	10.0	18.7	11.5	21.1
Filipino	914	1.6%	332.1	23.1	335.2	21.5	354.7	33.4	9.4	16.1	13.0	20.0
Hispanic	32635	56.8%	325.9	22.7	329.7	22.5	340.2	30.1	9.8	18.1	13.3	20.7
African American	7428	12.9%	330.2	25.0	331.3	25.6	340.6	34.6	10.0	19.1	12.1	23.3
White (not Hispanic)	10317	17.9%	333.1	25.4	334.9	26.2	359.3	40.7	9.8	20.6	14.2	24.5
Missing Ethnicity	1291	2.2%	325.4	26.7	327.8	28.7	347.9	40.9	12.1	21.6	15.0	25.2
Students Testing with Modifications	4350	7.6%	312.1	17.0	318.0	19.3	329.2	28.8	6.8	18.0	12.7	23.6
Students Receiving Special Education Services	15286	26.6%	319.6	22.1	323.7	24.1	326.9	29.7	8.5	19.5	8.7	23.6
Economically Disadvantaged	31960	55.6%	325.1	22.4	329.3	22.5	339.4	29.6	9.6	18.1	13.2	20.7
Language Proficiency												
English Only	28747	50.0%	331.8	25.0	333.2	25.7	349.4	38.1	9.5	19.6	13.0	24.2
Initially Fluent English Proficient	2968	5.2%	335.2	24.01	335.7	23.6	350.6	34.0	9.8	19.3	15.1	23.9
English Learners	23177	40.3%	321.4	20.3	327.4	20.9	337.4	26.9	9.9	17.7	13.8	19.7
Redesignated Fluent English	1817	3.2%	339.8	23.0	340.0	21.3	351.3	29.7	10.9	17.0	14.7	19.5
Missing Proficiency	793	1.3%	322.4	26.2	324.8	27.3	353.9	28.7	10.3	25.1	14.2	26.4

¹ Subcategory percents may not total to 100% due to missing demographic information

Table 2.35. Descriptive Statistics for Student 2004 Score, 2005 Score, 2006 Score and 2004–2005 Gain Scores, 2005–2006 Score Gains on the CAHSEE Math Test by Student-Level

Student Groups	N	Percent ¹	2004 Score		2005 Score		2006 Score		2004-2005 Gain Score		2005-2006 Gain Score	
			Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
All Students	57502	100%	334.2	18.5	335.0	18.9	347.2	29.0	5.6	15.3	12.7	18.9
Gender												
Females	24684	49.2%	333.2	16.3	334.2	16.9	342.6	20.3	4.0	14.4	12.3	17.1
Males	25384	50.6%	334.1	19.4	333.9	19.4	339.8	22.2	5.5	16.0	11.7	18.9
Ethnicity												
Native American	663	1.2%	330.1	17.5	330.6	17.0	344.3	26.9	3.7	13.9	12.2	19.7
Asian	2520	4.4%	348.5	26.6	348.8	28.7	366.3	40.3	8.7	16.7	13.2	20.6
Pacific Islander	538	0.9%	334.4	18.3	333.2	19.2	349.2	30.0	4.5	15.6	13.7	20.0
Filipino	990	1.7%	336.5	17.0	336.9	15.9	356.2	29.3	5.2	14.0	15.0	18.6
Hispanic	32871	57.2%	334.0	17.6	335.0	17.8	343.09	24.9	5.9	15.4	12.7	18.2
African American	9035	15.7%	329.1	15.8	330.0	17.0	341.1	26.6	3.8	13.9	12.3	18.5
White (not Hispanic)	12040	20.9%	333.9	18.2	335.2	19.1	355.9	33.4	5.5	15.5	12.3	19.2
Missing Ethnicity	1393	2.4%	332.2	19.3	331.4	22.1	348.8	34.9	4.2	17.3	12.4	21.0
Students Testing with Modifications	5874	10.2%	322.5	12.5	325.5	14.1	334.1	24.6	3.3	13.4	9.0	19.8
Students Receiving Special Education Services	16058	27.9%	326.5	16.5	328.0	17.8	332.1	23.9	4.8	15.5	8.4	19.4
Economically Disadvantaged	31286	54.4%	334.1	18.6	334.8	18.5	343.1	5.1	5.9	15.2	12.4	18.4
Language Proficiency												
English Only	34210	59.5%	331.6	17.0	332.6	18.0	348.0	30.4	4.5	14.9	12.1	18.7
Initially Fluent English Proficient	3534	6.1%	334.9	16.7	334.7	17.5	350.9	29.5	3.9	14.8	14.8	18.5
English Learners	18797	32.7%	336.3	20.0	337.4	20.1	344.0	26.1	7.1	15.8	12.7	18.7
Redesignated Fluent English	2656	4.6%	336.5	16.2	337.3	15.0	352.5	22.6	4.6	13.9	16.0	16.2
Missing Proficiency	432	1.5%	329.7	17.6	328.0	23.9	353.4	37.2	4.6	15.7	14.8	13.8
Highest Math Course Taken³												
Pre-Algebra	3104	5.4%	323.9	12.5	325.3	13.8	335.5	23.0	1.6	12.9	9.4	18.0
Algebra I/ IM	20214	35.2%	326.7	12.5	329.0	13.6	343.0	23.6	2.6	13.2	11.9	18.7
Algebra II/IM	9222	16.0%	330.7	12.1	332.7	12.7	361.0	31.5	2.6	12.0	16.2	17.9
Geometry/IM2	13214	23.0%	330.4	11.9	332.3	12.3	351.7	23.7	1.9	12.8	11.7	17.2
Advanced Math	1353	2.4%	332.9	15.3	334.1	11.8	404.0	39.3	2.3	12.6	14.9	17.1
General Math	1882	3.3%	319.0	12.9	321.0	14.5	327.8	25.6	3.5	12.1	18.6	18.4

¹ Subcategory percents may not total to 100% due to missing demographic information

² Possible math courses include General Math, Pre-Algebra, Algebra I and Integrated Math I, Algebra II and Integrated Math II, Geometry and Integrated Math II, and Advanced Math. Results are shown here for selected course levels.

Table 2.36. Description of Student-Level Variables

Student-Level Variable	Brief Description
Gender	Male is coded as "1"; Female is coded as "0"
Ethnic	<p>Values include: African American, Asian, Pacific Islander, Filipino, Hispanic, Native American, and White. (The groups listed here meet state and federal reporting requirements.)</p> <p>American Indian/ Alaskan: a person with origins in North, Central or South America who maintains tribal affiliation or community attachment.</p> <p>Asian: A person having origins in the Far East, Southeast Asia, or the Indian subcontinent.</p> <p>Pacific Islander: A person with origins in Hawaii, Guam, Samoa or other Pacific Islands (except the Philippine Islands).</p> <p>Filipino: A person with origins in the Philippine Islands.</p> <p>Hispanic: A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.</p> <p>African American: A non-Hispanic person having origins in any of the black racial groups of Africa.</p> <p>White: A non-Hispanic person with origins in Europe, North Africa, or the Middle East, for example, England, Portugal, Egypt, and Iran.</p>
Students Testing with Modifications	For ELA test, modifications involve oral presentation of reading test questions; For math test, modifications involve the use of calculators.
Students Receiving Special Education Services	Programs to identify and meet the educational needs of children with emotional, learning, or physical disabilities. Federal law requires that all children with disabilities be provided a free and appropriate education according to an Individual Education Plan (IEP) from infancy until 21 years of age.
Economically Disadvantaged	Economically disadvantaged student refers to those whose parents do not have a high school diploma or who participate in the free/reduced price lunch program because of low family income.
Language Proficiency	<p>Language Proficiency involves four categories: English Only, Initially Fluent English Proficiency (IFEP), English Learner, and Redesignated Fluent English proficiency (RFEP).</p> <p>English Only: A student who is from a family where English is the first language.</p> <p>Initially Fluent English Proficient (IFEP): A student who is from a family where English is not the first language, but who is sufficiently proficient in the English language.</p> <p>English Learner (EL): A student who is not sufficiently proficient in the English language to succeed in the school's regular instructional programs.</p> <p>Redesignated FEP: A student who is sufficient proficiently in English after taking the school's English programs.</p>
Math Course Taken	Math courses include General Math, Pre-Algebra, Algebra, Integrated Math I, Integrated Math II, Integrated Math III, Geometry, Algebra II, and Advanced Math. Results are shown here for selected course levels.

Table 2.37. Description of School-Level Variables

School-Level Variable	Brief Description
Categorical Variables	
School Type	Assigned in the County-District-School (CDS) file maintained by the Educational Demographics Office in CDE; values include: Elementary School (usually Grades K–5 or K–6), Middle School (usually Grades 6–8), Junior High School (usually Grades 7–9), High School (usually Grades 9–12), K–12 School, Continuation School, County Community School, Community Day School, Alternative School, Opportunity School, Special Education School, State Special Education School, Juvenile Court School and California Youth Authority (CYA) facility
Largest Ethnic Group	The largest ethnic group in the school study body; values include: African American, Asian, Filipino, Hispanic and Native American.
Indicator Variables With 1 = “Yes”, 0=“No”	
Charter?	Whether the school has been approved as a charter school.
Year-round?	Whether or not the school is in session year round.
Title I?	Whether or not the school has Title I. Title I is a federal program that provides supplementary services to low-achieving students from low-income families
Numeric Variables	
Enrollment	The number of kindergarten through 12th grade students enrolled in the school on "Information Day," a day in early October of the designated school year
Average Class Size	Calculated by dividing enrollment by the number of classes with 1–50 students, excluding special education and a few other minor categories.
Dropout Rate	Calculated by dividing enrollment by the dropouts for grades 9–12 (CDE has adopted the National Center for Education Statistics (NCES) definition of dropout since 2002–2003.)
% English Learners	The percentage of students who are not proficient in English (formerly Limited English Proficient, LEP) as measured by California English Language Development Test (CELDT)
% Free Meals	The percentage of students enrolled in the program that provides food for students from low-income families
% Minority	The percentage of non-White students in school student body.
% Full Teacher Credentials	The percentage of teachers having full teaching credentials.
Pupil-Teacher Ratio	The number of pupils per full-time-equivalent teacher (usually smaller than average class size)

Table 2.37. Description of School-Level Variables (Continued)

School – Level Variable		Brief Description
Finance Variables		
Revenues	Revenue Limit:	The specific combination of state and local property taxes a school district may receive per pupil (Average Daily Attendance [ADA]) for its general education program.
	Federal Revenues:	Funds from the federal government.
	Other State Revenues:	Funds from the state's budget: business, corporate and personal income taxes, sales taxes, and some special taxes; and state lottery sales.
	Other Local Revenues:	Funds from local property taxes
Expenditures	Certificated Salaries:	Salaries for certificated employees who are required by the state to hold teaching credentials, including full-time, part-time, substitute, or temporary teachers and most administrators.
	Classified Salaries:	Salaries for classified employees whose positions do not require certifications.
	Employee Benefits:	Benefits for school employees
	Books and Supplies:	Expenditures for items such as textbooks and other books, instructional materials and supplies, and pupil transportation.
	Services, Other Operating Expenses:	Expenditures for items such as rentals, leases and repairs, personal services or instructional consultants

Tables 2.38 through 2.40 provide information on categorical and continuous school/district-level variables respectively. A total of 942 regular schools identified in the CDE school directory file had values for these variables.

Table 2.38. Frequencies of Categorical School-Level Variables

School Type	Frequency	Percent
Regular Schools (Schools serving special populations were excluded from these analyses)	942	100.0%
Largest Ethnic Groups		
African American	56	5.9%
Asian	16	1.7%
Filipino	1	0.1%
Hispanic	412	43.7%
Native American	5	0.5%
White	452	48.0%
Title I Schools	455	48.3%
Year-Round Schools	90	9.6%
Charter School	82	8.7%

Table 2.39. Descriptive Statistics of Continuous School-Level Variables

School-Level Variable	Frequency	Mean	S.D.
Enrollment	942	1,060.0	1131.28
Average Class Size	934	21.3	10.3
Dropout Rate	940	8.2	21.9
% English Learners	942	14.7	15.4
% Free Meals	942	40.6	29.0
% Minority	942	58.0	28.9
% Full Teacher Credentials	932	87.9	15.8
Pupil-Teacher Ratio	942	21.5	8.8

In addition to the demographics, we sought to know the relationship between school financial resources and student score on CAHSEE. We used the finance variables at the district level for the analysis. The district finance variables have been merged into the school level and applied to all of the schools within the same district. Table 2.40 shows descriptive statistics for these variables.

Table 2.40. Descriptive Statistics of District-Level Finance Variables for Score Gain HLM Analyses (Unit: Dollars-per-Student [ADA])

District-Level Variables (Scaled in Dollars)	Frequency	Mean	S.D.
Revenue Limit	267	70,895.2	220,190.0
Federal Revenues	267	10,590.1	50,230.2
Other State Revenues	267	22,432.9	117,810.9
Other Local Revenues	267	4,697.4	7,500.0
Total Revenues	267	108,615.6	392,962.4
Certificated Salaries	267	52,087.2	188,704.7
Classified Salaries	267	15,793.8	55,442.3
Employee Benefits	267	20,571.8	78,003.1
Books and Supplies	267	5,625.4	23,314.2
Services, Other Operating Expenses	267	9,734.8	35,580.0
Average Teacher Salaries	250	55,971.3	5,723.3
Total Expenditures	267	103,813.0	380,484.3

Results of HLM Analyses

We began with two “unconditional” models that examined variation in student scores at each level before accounting for (conditioning on) differences associated with different student and school predictor variables. The first model, referred to as the score model, looked at variation in students’ average score across the three time periods (intercept). The second model looked at variation in the growth of student scores across the three time periods (slope). Table 2.41 shows how the variation in student scores

was divided among students and schools. For each model we listed the variance in student scores within schools and the variance in mean scores across schools, accompanied by the estimated percentage of variation at each level.

Table 2.41 Variation in 12th Grade Student Gain Scores at the Student, School Levels

Source	ELA		Mathematics	
	Variance	Percent of Total	Variance	Percent of Total
Model 1: Average Score Model				
Level-1/ Level-2: Student	501.0	81.7%	329.5	81.0%
Level-3: Schools	112.0	18.3%	80.2	19.0%
Total	613.0	100.0%	409.7	100.0%
Model 2: Growth Model				
Level-1/ Level-2: Student	473.9	89.9%	246.8	82.8%
Level-3: Schools	53.0	10.0%	51.1	17.2%
Total	526.9	100.0%	297.9	100.0%

As shown in Table 2.41, differences among schools could account for about 20 percent of the variation of student scores and only about 10 percent of the variation in growth in ELA scores and 17 percent of the variation in the growth of mathematics scores from 2004 to 2006. We next turned to analyses to determine how much of the overall variation at each level was related to specific student and school characteristics.

Tables 2.42 and 2.43 show the student and school level factors that were significant predictors of the level (intercept) and growth (slope) of scores for students still struggling to pass the CAHSEE in 12th grade. At the top of each table, the average student score (intercept) and average growth in student scores per year (slope) are shown. For this population, the average scores were 341 for ELA and 343 for mathematics and average annual growth was 10 points for ELA and 8 points for mathematics. The coefficients shown for each predictor indicate how much average scores or average growth increases for each unit change in the predictor. Categorical variables are coded as 1 or 0, so a unit of change is the difference between being in the category and not being in the category. For example, Table 2.42 indicates that students receiving special education services had average scores that were 23 points lower than students who were not receiving special education services. In addition, students receiving special education services had annual score increases that were nearly 5 points less than students who were not receiving special education services.

Table 2.42. HLM Parameter Estimates: CAHSEE ELA

Predictors		ELA Regression Coefficient	
		INTRCPT1	TIME slope
LEVEL-1		341.00	10.00
LEVEL-2	Economic Disadvantage	-3.90	-0.28
STUDENT-LEVEL	Students Receiving Special Education Services	-23.06	-4.76
PREDICTORS	Gender (1=Male, 0=Female)	-5.54	0.25
	Hispanics	-3.51	-2.35
	African American	-7.48	-2.75
	Asian	-5.56	-0.27
	Pacific Islander	-3.35	-2.78
	Native American	-8.48	-3.08
	Initially English Proficient	-0.22	-0.58
	English Learner (EL)	-15.64	-0.54
	Reclassified Proficient (RFEP)	2.29	-1.11
LEVEL-3	Title I School	-3.60	-0.37
SCHOOL -LEVEL	Free Meals Percent	-0.06	-0.03
PREDICTORS	Minority Percent	-0.13	-0.05
	English Learner Percent	-0.13	n.s.*
	Books and Supplies	0.000028	0.000006
	Average Teacher Salaries	n.s.*	0.000155

* All coefficients were significantly different from 0 at the .01 level, except as indicated by "n.s."

Table 2.43. HLM Parameter Estimates: CAHSEE MATH

Predictors		Math Regression Coefficient	
		INTRCPT1	TIME slope
LEVEL-1		342.74	8.1
LEVEL-2	Economic Disadvantage	-2.01	-0.40
STUDENT-LEVEL	Students Receiving Special Education Services	-17.04	-3.80
PREDICTORS	Gender (1=Male, 0=Female)	2.08	0.49
	Hispanics	-3.74	-2.35
	African American	-7.02	-1.03
	Asian	10.07	-0.06
	Filipino	-3.62	-0.60
	Pacific Islander	-4.06	-2.12
	Native American	-5.36	-1.54
	Initially English Proficient	1.11	0.21
	English Learner (EL)	-2.04	-1.39
	Reclassified Proficient (RFEP)	1.59	-0.01
	Math Courses-General Math	-15.24	0.35
	Math Courses-Algebra I / Integrated Math	-9.15	3.22
	Math Courses-Algebra II / Integrated Math	-4.41	7.23
	Math Courses-Geometry / Integrated Math	-0.48	5.24
	Math Courses-Advanced Math	23.98	12.00
LEVEL-3	Title I School	-1.77	-0.24
SCHOOL-LEVEL	Free Meals Percent	-0.08	-0.03
PREDICOTRS	Minority Percent	-0.002	-0.02
	English Learners Percent	n.s.*	n.s.*
	Books and Supplies	0.000010	0.000008
	Average Teacher Salaries	0.00022	0.00003

* All coefficients were significantly different from 0 at the .01 level, except as indicated by "n.s."

Student-Level Results. The intercept coefficients for the student-level variables are highly consistent with score differences reported earlier in this chapter. For the most part, the growth coefficient follow a similar pattern, meaning that groups of students having lower average scores also have lower annual gains. Students receiving special education services have the lowest average scores and the lowest annual gains for both ELA and mathematics. English learners and Native Americans have the next lowest average scores for ELA. ELA score gains are among the lowest for Native Americans, but score gains for English learners are only slightly below average. For mathematics, students whose highest-level math course by the 12th grade was General Mathematics scored 15 points below average and students who took only Algebra or Integrated Mathematics I scored 9 points below average. Math score gains were low for students receiving special education services (-3.8) and for Hispanics and Pacific Islanders. Math score gains were quite high for students who took mathematics courses beyond Algebra I.

School-Level Results. At the school level, Title I schools were associated with lower scores and lower score gains than other schools. A 1 percent increase in the number of students receiving free/reduced lunch was associated with the deficit of 0.06 points on the average ELA score and 0.08 points on the average mathematics scores. Expenditures on average teacher salaries and books and supplies showed a positive relationship to score gains for both ELA and mathematics, although the effect was small (meaning it would take a lot more dollars to generate significant increases in score gains).

Summary of HLM Findings

Hierarchical linear modeling was used to investigate the degree to which the various characteristics of students and schools predicted achievement on the CAHSEE ELA and mathematics tests for students who were struggling to pass the CAHSEE in 12th grade. Through studying students' performance on the CAHSEE reading and math tests across three school years, we also examined the degree to which the differences in student score gains over time were associated with the various characteristics of students and schools. One of the findings was that the majority of the variations of the scores were explained by the student-level variables, while the school-level variations account for a modest proportion (10% – 20%) of the overall variation in scores and score gains for both ELA and mathematics. Consistent with past studies, the results also indicated that students with such factors as economic disadvantages, special education needs, ethnic minority backgrounds, or who were English learners scored lower on both the ELA and Math tests. Similarly, those schools serving higher percentages of disadvantaged students had smaller mean gains on the exam. The relatively encouraging finding is that taking math courses shows significantly positive effects on score gains as well as on average score levels.

Student Questionnaire Responses

A student questionnaire was administered to students at the end of each of the CAHSEE tests to investigate several topics, including how students prepared for the CAHSEE, how topics on the test were covered in their courses, factors that may have prevented them from performing well on the tests, and their expectations for graduation

and post-high-school plans. The questionnaire has been administered since 2001. Some significant changes were made to the questionnaire in 2005, so only results from the 2005 and 2006 administrations are reported here.

The 2005–06 CAHSEE administrations included 10th grade students taking the CAHSEE for the first time and also 11th and 12th grade students who had yet to pass the CAHSEE. The 2004–05 CAHSEE administrations included only 10th and 11th grade students. In analyzing the questionnaire responses, we focused on specific comparisons between the cohorts (classes of 2006 through 2008) and also within cohort (differences in responses across grades for the same group of students). Specific comparisons included:

- Between Cohorts
 - 2006 10th graders (Class of 2008) to 10th graders in 2005 (Class of 2007)
 - 2006 11th graders (Class of 2007) to 11th graders in 2005 (Class of 2006)
- Within Cohort
 - 2006 11th graders to a matched sample of 2005 10th graders
 - 2006 12th graders to a matched sample of 2005 11th graders

For each comparison, we looked at (a) all students, (b) those who did not pass the related test, and (c) disadvantaged students, including English learners, students with disabilities, and economically disadvantaged students. Note that the matched sample included only those 2005 students who had not passed (which is why they were still taking the CAHSEE in 2006), so the “all students” category was omitted for 2005 in these comparisons. Tables 2.44 and 2.45 show the number of students included in the between-cohort comparisons and Table 2.46 shows the number of students included in the within-cohort (matched sample) comparisons².

Table 2.44. Number of Test Takers in the 2005 and 2006 10th Grade Cohorts

	ELA		Math	
	2006 Cohort	2005 Cohort	2006 Cohort	2005 Cohort
All	430,942	450,294	428,008	450,534
Passed	339,008	346,036	326,700	334,246
Didn't Pass	91,934	104,258	101,308	116,288
Female	214,298	220,820	214,168	221,147
Male	216,261	228,396	213,468	228,284
Asian	39,388	42,058	39,060	41,946
African American	33,525	36,849	33,324	37,057
Hispanic	185,333	184,124	185,919	184,387
White	148,350	159,259	145,581	159,090
Non-Disadvantaged	217,934	226,307	213,579	226,466
Disadvantaged	213,008	223,987	214,429	224,068
Econ. Disadv.	183,277	187,334	183,701	187,534
English Learner	69,055	80,196	69,586	79,937
Disabilities	33,854	39,935	34,146	39,915

² Responses to the student questionnaire were, appropriately, not included in the school detail files provided by ETS in September 2006. Data reported here are based on the statistical data files received previously. Minor differences in the sample sizes and corrections to demographic variables for some students were not judged to be significant for these analyses.

Table 2.45. Numbers of Test Takers in the 2005 and 2006 11th Grade Cohorts

	Grade 11-ELA		Grade 11-Math	
	All 2006	Matched 2005	All 2006	Matched 2005
All	109,620	42,279	118,077	42,178
Passed	52,464	17,989	53,762	17,408
Didn't Pass	57,156	24,290	64,315	24,770
Female	46,490	17,849	57,977	21,073
Male	62,978	24,430	59,927	21,105
Asian	7,083	2,651	4,867	1,317
African American	12,919	3,797	15,904	4,817
Hispanic	62,354	27,410	66,609	26,704
White	21,069	6,859	24,012	7,749
Non-Disadvantaged	1,989	6,416	2,425	8,772
Disadvantaged	107,631	35,863	115,652	33,406
Econ. Disadv.	64,232	27,196	66,683	25,408
English Learner	43,343	20,460	38,950	16,118
Disabilities	23,484	12,454	24,713	12,411

Table 2.46. Numbers of Test Takers in Matched 2005 and 2006 Samples

	ELA-Matched		Math-Matched	
	2006 (Grade 11)	2005 (Grade 10)	2006 (Grade 11)	2005 (Grade 10)
All	67,997	67,960	77,522	76,598
Passed	29,427		32,846	
Didn't Pass	38,570		44,676	
Female	28,504	28,494	39,697	39,686
Male	39,492	39,465	37,823	37,805
Asian	4,420	4,415	2,540	2,537
African American	7,389	7,387	10,278	10,267
Hispanic	41,887	41,874	46,828	46,816
White	10,955	10,939	14,009	14,006
Non-Disadv	895	897	1,342	1,338
Disadvantaged	67,102	67,063	76,180	75,260
Eco. Disadv.	44,051	44,033	47,474	47,460
EL	31,359	31,343	28,141	28,127
Disabilities	16,744	16,738	18,471	18,459
	All Grade 12 (Class of 2006)	Matched to Grade 11	All Grade 12 (Class of 2006)	Matched to Grade 11
All	65,233	39,600	69,035	42,324
Passed	31,737	17,231	31,961	18,340
Didn't Pass	33,496	22,369	37,074	23,984
Female	27,380	16,881	33,418	21,737
Male	37,721	22,719	35,466	20,587
Asian	4,270	2,741	2,744	1,331
African American	8,405	4,433	10,509	6,321
Hispanic	38,041	25,438	38,917	25,755
White	11,079	5,399	13,062	7,071
Non-Disadv	1,148	407	1,461	667
Disadvantaged	37,968	26,422	37,692	25,942
Eco. Disadv.	27,305	20,556	22,493	16,102
EL	17,006	12,646	18,036	13,722
Disabilities	65,233	39,600	69,035	42,324

Results

Comparisons for a few key questions are discussed here. Detailed results for each question and demographic group are provided in Appendix C. There was a high interest in whether students had taken courses needed to learn the material covered by the CAHSEE, so we focus on questions 9 and 12, which relate to this issue. Two new questions were added this year. Question 4 asks about potential barriers to graduation and Question 13 asks students about extra efforts to learn the material covered by the CAHSEE. We include results for these questions here because the topics were judged to be of high interest, even though comparisons to prior cohorts are not yet possible.

Question 4 of the Student Questionnaire asked test takers to indicate factors that could prevent them from graduating from high school. This question was a new question and it was only administered in 2006. Response frequencies are shown in Table 2.47.

Question 4: What might prevent you from graduating? (Mark all that apply.)

- A. I may not pass all the required courses.*
- B. I may not pass the CAHSEE exam.*
- C. I may drop out before the end of 12th grade.*
- D. I may not be able to meet some other graduation requirement.*

Table 2.47. Student-Reported Factors That Might Prevent Them From Graduating

Subject	Grade	Group	A	B	C	D
ELA	10	All	25.1%	38.4%	13.3%	23.2%
		Didn't Pass	24.7%	45.6%	10.4%	19.3%
		Disadvantaged	24.9%	42.3%	11.1%	21.7%
	11	All	21.3%	51.4%	9.5%	17.8%
		Didn't Pass	21.4%	52.4%	10.4%	15.8%
		Disadvantaged	21.1%	52.8%	9.5%	16.6%
	12	All	15.5%	63.4%	7.2%	13.9%
		Didn't Pass	17.2%	60.7%	8.3%	13.8%
		Disadvantaged	15.4%	64.5%	7.1%	13.0%
Math	10	All	26.8%	41.0%	11.8%	20.4%
		Didn't Pass	26.5%	47.6%	9.2%	16.7%
		Disadvantaged	26.4%	44.4%	10.2%	18.9%
	11	All	21.5%	54.1%	8.4%	16.0%
		Didn't Pass	21.8%	54.9%	8.5%	14.8%
		Disadvantaged	21.7%	54.8%	8.4%	15.2%
	12	All	14.8%	66.7%	6.5%	11.9%
		Didn't Pass	16.5%	64.2%	7.1%	12.1%
		Disadvantaged	15.0%	66.8%	6.6%	11.6%

- A. I may not pass all the required courses.*
- B. I may not pass the CAHSEE exam.*
- C. I may drop out before the end of 12th grade.*
- D. I may not be able to meet some other graduation requirement.*

The CAHSEE was most frequently judged to be a barrier to graduation, and increasingly so for students in later grades who had not yet passed. About two-thirds of the 12th graders taking the CAHSEE were concerned that they may not pass. Interestingly, the percentage of students who thought that they might drop out was lower for 12th graders than for 10th or 11th graders. About 15 percent of the students taking the CAHSEE in 12th grade were also concerned that they might not pass required courses. Concerns in all categories were slightly higher for students who, in fact, still did not pass, but responses from disadvantaged students were not much different from responses from all students at each grade level.

Question 9 of the Student Questionnaire investigated whether all of the tested topics were covered in the courses that students had taken. Table 2.48 shows comparisons of response frequencies for the various cohorts.

Question 9: Were the topics on the test covered in courses you have taken?

- A. Yes, all of them.*
- B. Most, but not all of them (two thirds or more were covered).*
- C. Many topics on the test were not covered in my courses (less than two thirds were covered).*

The percentage of 10th graders reporting that all or most of the topics on the CAHSEE were covered was up by about one point compared to 10th graders in 2005. For both years, 10th graders who did not pass were more likely to report that many topics were not covered in courses they had taken (by 8 to 10 percentage points). Frequencies for disadvantaged students were in between.

For 11th grade students there was also an increase in the percentage reporting that most or all topics on the test were covered in their courses (close to 2 percentage points). Differences for students who did not pass and for disadvantaged students were similar to those found for 10th graders, but considerably smaller.

In examining within-cohort changes, 11th graders in 2006 were somewhat more likely to report that many ELA topics were not covered in their courses than they were when they were in 10th grade (15% compared to 13% for ELA, but less likely to report that many math topics were not covered (16% compared to 19%). The percentage of 12th graders reporting that many topics were not covered decreased from 11th to 12th grade. Perhaps many have now taken courses they need to pass the exam.

Table 2.48. Self-Reported Exposure to Topics on the Tests

Subject	Group	All or Most Were Covered (A or B)	Many Topics were Not Covered (C)	All or Most Were Covered (A or B)	Many Topics were Not Covered (C)
ELA	2006 (Grade 10)			2005 (Grade 10)	
	All	93.3%	6.7%	92.2%	7.7%
	Didn't Pass	84.8%	15.2%	83.9%	16.1%
	Disadvantaged	88.4%	11.6%	87.4%	12.7%
	2006 (Grade 11)			2005 (Grade 11)	
	All	84.9%	15.1%	82.1%	17.8%
	Didn't Pass	81.5%	18.5%	79.9%	20.1%
	Disadvantaged	83.3%	16.7%	81.1%	18.9%
	2006 (Grade 11-Matched)			2005 (Grade 10-Matched*)	
	All	84.7%	15.3%	--	--
	Didn't Pass	82.6%	17.4%	87.3%	12.7%
	Disadvantaged	83.9%	16.1%	83.3%	16.7%
	2006 (Grade 12-Matched)			2005 (Grade 11-Matched*)	
	All	83.4%	16.6%	--	--
	Didn't Pass	81.5%	18.5%	81.8%	18.2%
	Disadvantaged	82.7%	17.3%	81.0%	19.0%
Math	2006 (Grade 10)			2005 (Grade 10)	
	All	90.6%	9.4%	88.9%	11.1%
	Didn't Pass	81.5%	18.5%	79.9%	20.1%
	Disadvantaged	85.8%	14.2%	84.3%	15.7%
	2006 (Grade 11)			2005 (Grade 11)	
	All	83.7%	16.3%	82.1%	17.8%
	Didn't Pass	80.3%	19.7%	79.9%	20.1%
	Disadvantaged	82.1%	17.9%	81.1%	18.9%
	2006 (Grade 11-Matched)			2005 (Grade 10-Matched*)	
	All	83.9%	16.1%	--	--
	Didn't Pass	81.5%	18.5%	81.0%	19.0%
	Disadvantaged	83.0%	17.0%	81.1%	18.9%
	2006 (Grade 12-Matched)			2005 (Grade 11-Matched*)	
	All	82.6%	17.4%	--	--
	Didn't Pass	80.0%	20.0%	79.2%	20.8%
	Disadvantaged	82.3%	17.7%	79.0%	21.0%

* Note: All matched cases in 2006 were students who did not pass in 2005; information on "all" 2005 students is not available for the matched samples.

Question 12 of the Student Questionnaire investigated the reasons that students found the tests difficult. Response frequencies for this question are presented in Table 2.49.

Question 12: If some topics on the test were difficult for you, was it because:

- A. I did not take courses that covered these topics.*
- B. I had trouble with these topics when they were covered in courses I took.*
- C. I have forgotten things I was taught about these topics.*
- D. None of the topics was difficult for me.*

The percentage of 10th graders saying that they did not take courses that covered these topics dropped slightly from 2005 to 2006 and the percentage saying that none of the topics was difficult increased slightly, even though performance on the test itself did not change. Tenth grade students who did not pass were much more likely to report having not taken courses covering these topics and having difficulty with the topics in the courses they took and much less likely to say that none of the topics was difficult. Response frequencies for disadvantaged students were in between.

Table 2.49. Students' Reasons That Topics Were Difficult on the Tests

Subject	Group	A	B	C	D	A	B	C	D
ELA	2006 (Grade 10)					2005 (Grade 10)			
	All	7.6%	17.5%	37.8%	37.1%	8.2%	18.1%	37.9%	35.8%
	Didn't Pass	16.4%	29.1%	38.5%	16.0%	17.4%	30.2%	37.7%	14.7%
	Disadvantaged	13.0%	25.1%	39.8%	22.0%	13.9%	25.8%	39.3%	20.9%
	2006 (Grade 11)					2005 (Grade 11)			
	All	16.5%	27.8%	37.3%	18.3%	17.5%	31.4%	38.0%	13.1%
	Didn't Pass	19.9%	31.2%	35.3%	13.5%	20.2%	32.7%	35.6%	11.5%
	Disadvantaged	18.4%	30.4%	36.6%	14.6%	19.1%	31.8%	37.0%	12.1%
	2006 (Grade 11-Matched)					2005 (Grade 10-Matched*)			
	All	17.1%	30.7%	37.7%	14.5%	--	--	--	--
	Didn't Pass	19.5%	32.3%	35.6%	12.7%	16.9%	30.5%	38.0%	14.7%
	Disadvantaged	18.3%	31.6%	36.8%	13.4%	18.0%	30.9%	36.9%	14.2%
	2006 (Grade 12-Matched)					2005 (Grade 11-Matched*)			
	All	18.4%	34.8%	33.7%	13.1%	--	--	--	--
	Didn't Pass	20.3%	35.1%	32.5%	12.1%	20.7%	31.6%	35.4%	12.3%
	Disadvantaged	19.1%	35.6%	33.2%	12.2%	21.4%	32.0%	34.9%	11.8%
Math	2006 (Grade 10)					2005 (Grade 10)			
	All	12.6%	23.8%	43.8%	19.8%	13.5%	22.6%	44.7%	19.2%
	Didn't Pass	20.4%	36.3%	35.2%	8.2%	22.4%	34.9%	35.3%	7.4%
	Disadvantaged	14.1%	28.3%	44.4%	13.2%	20.0%	28.8%	40.2%	11.0%
	2006 (Grade 11)					2005 (Grade 11)			
	All	22.2%	37.5%	32.7%	7.6%	22.0%	37.8%	34.8%	5.4%
	Didn't Pass	17.5%	32.6%	40.2%	9.8%	23.5%	38.2%	32.3%	6.0%
	Disadvantaged	21.7%	35.4%	34.9%	8.1%	23.4%	36.7%	33.9%	6.0%
	2006 (Grade 11-Matched)					2005 (Grade 10-Matched*)			
	All	19.9%	38.2%	35.2%	6.7%	--	--	--	--
	Didn't Pass	21.2%	38.8%	32.7%	7.2%	21.9%	35.4%	35.6%	7.1%
	Disadvantaged	21.0%	36.9%	34.8%	7.3%	22.9%	34.2%	35.1%	7.8%
	2006 (Grade 12-Matched)					2005 (Grade 11-Matched*)			
	All	20.9%	41.4%	31.6%	6.1%	--	--	--	--
	Didn't Pass	22.4%	41.1%	29.5%	7.0%	24.2%	37.5%	32.2%	6.1%
	Disadvantaged	21.6%	40.4%	31.5%	6.5%	25.1%	36.3%	31.9%	6.7%

A. I did not take courses that covered these topics.

B. I had trouble with these topics when they were covered in courses I took.

C. I have forgotten things I was taught about these topics.

D. None of the topics was difficult for me.

* Note: All matched cases in 2006 were students who did not pass in 2005; information on "all" 2005 students is not available for the matched samples.

For ELA, this year's 11th graders were also slightly less likely to report not having taken relevant courses or having difficulty with the topics they took in comparison to 11th graders in 2005. For mathematics, response frequencies were relatively unchanged from 2005. Students in the 12th grade in 2006 were less likely to report not taking courses that covered topics on the test (18% compared to 21% for ELA and 21% compared to 24% for math) but much more likely to report having had difficulty with the topics in the courses that they took (35% compared to 32% for ELA and 41% compared to 38% for mathematics).

Question 13 of the Student Questionnaire asked test takers if the CAHSEE was a challenge to them and what their strategies were to deal with it. This question was a new question in 2006. Table 2.50 displays response frequencies for this question.

Question 13: Will you work or have you worked harder to learn the English/language arts skills tested by the CAHSEE? (Mark all that apply.)

- A. I do not have to work any harder to meet the CAHSEE requirement.*
- B. I am taking additional courses.*
- C. I am working harder in the courses I am taking.*
- D. I am getting help outside of the classroom.*
- E. I am repeating a course to learn the material better.*
- F. I will stay in school an additional year to learn the required material.*

Table 2.50. Strategies Reported to Meet the CAHSEE Requirements

Subject	Grade	Group	A	B	C	D	E	F*
ELA	10	All	45.3%	6.5%	43.9%	9.4%	4.7%	--
		Didn't Pass	18.4%	13.8%	51.6%	16.3%	10.8%	--
		Disadvantaged	31.2%	8.9%	52.2%	12.2%	6.6%	--
	11	All	22.6%	15.1%	50.2%	13.7%	9.7%	--
		Didn't Pass	18.0%	17.1%	48.4%	15.2%	11.7%	--
		Disadvantaged	19.1%	16.0%	51.9%	14.2%	10.3%	--
	12	All	20.9%	20.2%	46.8%	15.6%	9.9%	--
		Didn't Pass	17.2%	21.0%	45.2%	16.2%	11.5%	--
		Disadvantaged	17.4%	21.5%	48.7%	16.1%	10.4%	--
Math	10	All	40.1%	7.1%	44.3%	10.3%	6.7%	3.3%
		Didn't Pass	14.2%	12.1%	51.6%	15.4%	12.3%	8.5%
		Disadvantaged	26.7%	9.1%	51.8%	12.2%	8.5%	5.2%
	11	All	17.5%	14.2%	48.8%	14.4%	12.2%	6.8%
		Didn't Pass	13.7%	15.1%	47.5%	15.0%	13.0%	9.0%
		Disadvantaged	15.1%	14.7%	49.8%	14.2%	12.3%	7.9%
	12	All	16.8%	19.9%	43.7%	17.3%	11.8%	6.7%
		Didn't Pass	14.3%	19.5%	42.3%	16.9%	12.2%	8.8%
		Disadvantaged	14.5%	20.8%	45.0%	17.0%	12.0%	7.2%

* Note: Responses to option "F" for Question 13 for the ELA questionnaire were lost after scanning. The correct information is being retrieved by Pearson and ETS and will be available for comparative analyses in next year's evaluation report.

About 40 to 45 percent of all 10th graders did not think that they have to work harder to meet the CAHSEE requirements, although only 14 to 18 percent of the 10th graders who did not pass thought this, even though they had not yet received their test results. For 11th and 12th grade students still struggling to pass the CAHSEE, only about 15 to 20 percent thought that they would not have to work harder.

About half the students in each grade reported that they were working harder in the classes they were taking. This percentage did not increase significantly with grade. The proportion reporting taking additional courses did increase with grade, from about 7 percent of 10th graders to about 20 percent of 12th graders. Disadvantaged students were slightly more likely to report taking additional courses. The percentage of students reporting receiving help outside the classroom also increased with grade, although not quite as dramatically (from about 10 percent in 10th grade to 16 or 17 percent in 12th grade).

For reasons that we cannot exactly understand, responses to the last option (stay in school an additional year) were not included for students taking the ELA test but were included for the questionnaire following the mathematics test. About 7 percent of 11th and 12th graders reported that they might stay in school an additional year.

Summary of Test Results

Nearly half of the students who had yet to meet the CAHSEE requirement at the beginning of their senior year did so in time to graduate with their class, but nearly 40,000 students had still not passed both parts by the end of their senior year. We do not know how many of these students met all other graduation requirements, although we do know that about 15 percent of them reported not having taken Algebra I, which is one of the other graduation requirements.

Passing rates in 2006 for 10th and 11th graders were similar to 2005 passing rates for students in these grades. There was neither a significant increase nor a decline. Passing rates continued to be low for students in special education programs (21% for 10th graders in special education compared to 65% for all 10th graders) and for English learners (27%). Additional analyses of the characteristics of these students relating to CAHSEE results are provided in Chapter 4.

No significant problems were found in initial analyses of test score characteristics. Scoring consistency for the essays was up slightly from last year. The score conversion tables were similar to the tables for prior test forms, indicating that test difficulty had not changed significantly.

Chapter 3: A Closer Look at Specific Populations

Introduction

Over the past several years, the CAHSEE has posed a particularly significant barrier for two special populations of students—English learners (EL) and students with disabilities (SD). In 2005, we merged additional data on students in special education programs from the California Special Education Management Information System (CASEMIS) with CASHEE results. Our 2005 annual report included analyses providing descriptive information on students in this population and also analyses of differences by curriculum, services, and disability in the rates at which these students passed the CAHSEE. We conducted similar analyses in 2006, the results of which are described later in this chapter.

This year, we also conducted additional analyses of English learners (ELs) and of former English learners who have been reclassified as having fluent English proficiency (RFEP). Table 3.1 shows the number of answer documents from the 2005–06 CAHSEE administrations for students in these two categories. Our analyses focused on the 10th grade assessment, where all students participated; thus results are representative of a whole high school class. The passing rates for 10th grade EL students were 35.8% for the ELA test and 44.3% for the mathematics test. Analyses reported in this section are based on answer documents (test administrations). A few 10th grade students tested more than once and their EL status may have changed between administrations. Counting test administrations rather than students results in 2006 total counts that are slightly greater; passing rates are thus lower in comparison to the analyses based on students reported in Chapter 2.

Table 3.1 shows the numbers and ELA and mathematics passing rates for EL and RFEP students in comparison to students who spoke English only or were initially fluent in English. Again, counts are based on answer documents, so students testing more than once during the 2005–06 school year are included multiple times. Nearly all 10th graders tested only once during the 2005–06 school year, but many 11th and 12th grade students tested multiple times. In addition, 11th and 12th grade students who did not take one of the tests but who were coded as having previously passed a test are counted as “pass” along with students who took the test and achieved a passing score.

As in prior administrations, students who were reclassified as fluent in English had higher passing rates for both the ELA and mathematics tests than students who spoke English only or were initially fluent in English. Scoring well on the ELA test is not surprising since most had to pass a similar test to be reclassified. It is more noteworthy that RFEP students also had higher passing rates on the mathematics test. Eleventh and 12th grade students who were reclassified as fluent English proficient also had higher passing rates than any other group. For all groups except EL students, passing rates for 11th and 12th students who had not previously passed the CAHSEE were considerably lower than the 10th grade passing rates based on all students. For EL students, however, 10th, 11th, and 12th grade passing rates were about the same.

Table 3.1. Number of 10th Grade Answer Documents and CAHSEE Passing Rates by Grade and Language Fluency

Grade	English Language Fluency	Number of Tests	Percent Pass*	
			ELA	Math
10	English Only	323,618	75.6%	71.6%
	Initially Fluent	45,744	82.4%	79.6%
	English Learner	89,659	34.5%	42.7%
	Reclassified Fluent	76,314	85.3%	81.4%
	Unknown	1,919	53.7%	49.4%
11	English Only	141,572	48.8%	36.2%
	Initially Fluent	15,486	54.0%	42.1%
	English Learner	92,130	28.4%	38.7%
	Reclassified Fluent	19,935	64.8%	48.9%
	Unknown	1,734	38.1%	33.1%
12	English Only	102,462	48.3%	33.9%
	Initially Fluent	11,191	52.2%	39.6%
	English Learner	70,832	31.1%	44.7%
	Reclassified Fluent	11,128	61.3%	46.0%
	Unknown	2,293	37.1%	32.8%

Note. * Passing rates include students who passed or did not test, but were coded as having passed previously.

The remainder of the analyses of EL and RFEP students focuses on results from the census testing of 10th graders.

Results for English Learners

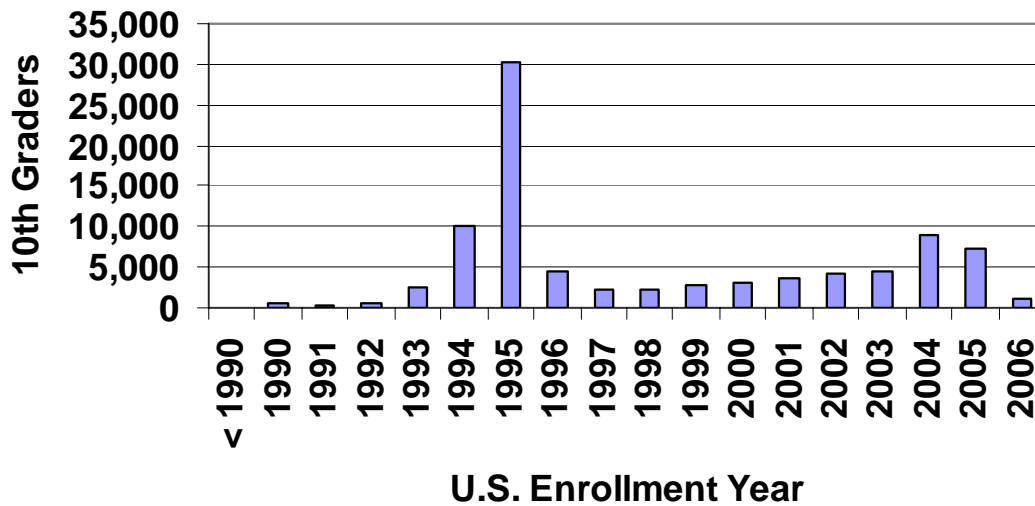
EL Enrollment Date

We examined the year of enrollment coded for English learners who tested as 10th graders in 2006. Instructions on the answer document ask for the date the EL student was first enrolled in a school in the United States or its territories, not necessarily in their current school. Table 3.2 shows the number of 10th grade EL students and their ELA and Math passing rates for each year of enrollment. This information is displayed graphically in Figures 3.1 (number of students) and 3.2 (CAHSEE passing rates).

Table 3.2. Number of 10th Grade Students and CAHSEE Passing Rates by Year of EL Enrollment

Year of Enrollment	Estimated Grade Level*	Number of Students	Percent Passing ELA	Percent Passing Math
< 1990		119	24.4%	21.9%
1990		675	37.0%	41.3%
1991		172	25.6%	26.2%
1992		511	16.6%	16.8%
1993		2,506	20.9%	18.9%
1994		10,110	28.3%	28.3%
1995	K	30,365	40.2%	42.2%
1996	1	4,463	39.2%	41.1%
1997	2	2,321	39.1%	41.4%
1998	3	2,350	41.0%	43.5%
1999	4	2,661	37.4%	44.8%
2000	5	3,174	37.7%	48.1%
2001	6	3,582	36.4%	50.3%
2002	7	4,196	35.0%	52.3%
2003	8	4,357	30.0%	49.6%
2004	9	8,852	25.7%	45.8%
2005	10	7,144	20.7%	44.7%
2006	10	1,244	12.7%	36.0%

Note. *Estimated grade level is based upon normal grade progression and 10th grade status in 2005–2006, assuming no grade retention or skipped grade. This is a rough group-level estimate only. Students enrolled before 1995 (and some others) were likely to have been retained in grade one or more times.

**Figure 3.1. Number of 10th Grade EL students by year of enrollment**

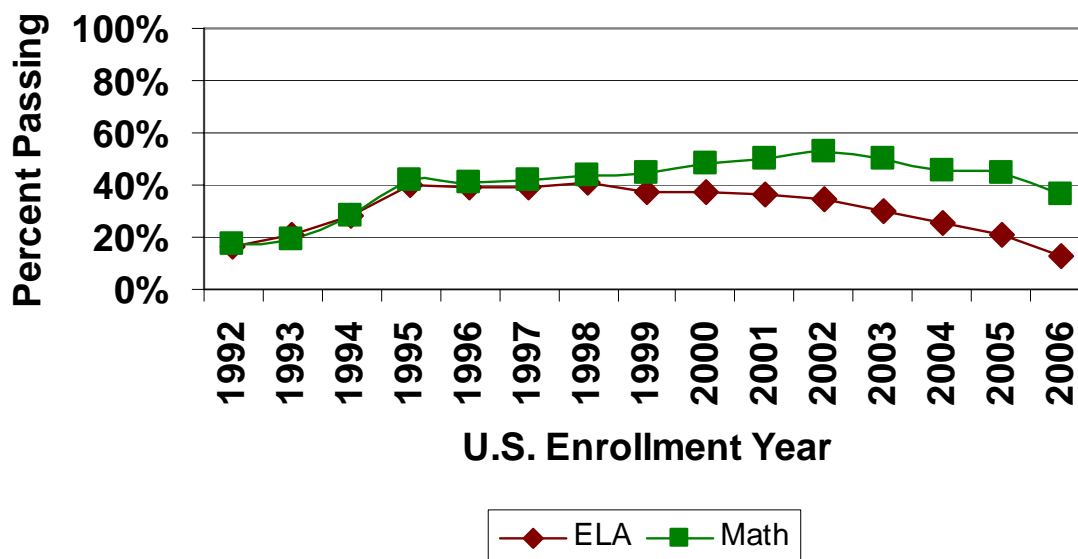


Figure 3.2. CAHSEE passing rates for 10th Grade EL students by year of enrollment

Many students enrolled early. It appears that a significant number of EL students have been enrolled for a considerable time, essentially since kindergarten. Students who were in the 10th grade in 2005–2006 would have entered kindergarten in 1995 and this was by far the most frequently coded enrollment year. Students with enrollment dates prior to 1995 probably repeated one or more grades, thus having started kindergarten prior to 1995. Students enrolled prior to 1995 were struggling academically, as indicated by significantly lower passing rates. Figure 3.2 shows a similar dip in passing rates for students enrolled before 1995.

EL students did better on the math test than on the ELA test. For EL students enrolled for eight or more years, ELA and math passing rates were virtually identical. For students who were more recently enrolled, passing rates were considerably lower on the ELA test. For students enrolled from 1999 through 2005, the math passing rates were essentially 50 percent or higher, while ELA passing rates dropped from 46 percent for students enrolled in 1999 to 23 percent for students enrolled in 2005. Even for very recently enrolled students (2006), the math passing rate was above 40 percent, while the ELA passing rate was only 15 percent. Recently enrolled EL students clearly had difficulty with the CAHSEE ELA test, but less difficulty with the math test.

Recently enrolled students performed less well. Tenth grade students enrolled in the last six or seven years (since 2000) had significantly lower ELA passing rates (below 40%) compared to students who had been enrolled for longer periods. Students enrolled in the last two years (2004 or later) had passing rates below 30 percent and the passing rate for students first enrolled in 2006 was only 15 percent.

Home Language

The primary language of EL students was recorded on the CAHSEE answer documents. Table 3.3 shows the number of students and CAHSEE passing rates for different primary languages. Only languages with at least 300 10th grade students are shown; the remaining ones are grouped under “other.” We also combined two separately coded Chinese dialects (Mandarin and Cantonese) as passing rates for these two dialects were similar. Except for Other and English, the categories are ordered by their ELA passing rates. Figures 3.3 through 3.5 show the passing rates graphically.

Table 3.3. Number of 10th Grade EL Students and CAHSEE Passing Rates by Primary Language

Home Language	Number of Students	Percent Passing	
		ELA	Math
Other/Unknown	3,132	42.4%	54.1%
English	1,098	35.2%	43.7%
Spanish	74,782	31.3%	37.4%
Khmer	700	30.7%	39.3%
Arabic	434	33.0%	47.5%
Punjabi	607	36.7%	58.8%
Hmong	1,645	41.7%	56.0%
Chinese	2,150	47.0%	81.4%
Armenian	508	47.4%	62.6%
Farsi	328	47.9%	60.4%
Russian	475	48.0%	59.4%
Filipino	1,240	48.9%	56.5%
Vietnamese	1,537	55.1%	77.4%
Korean	984	57.2%	88.5%

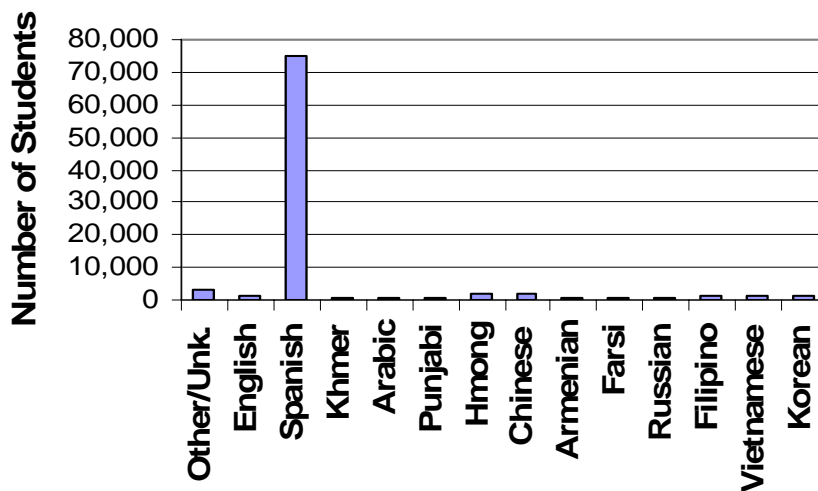


Figure 3.3. Number of 10th Grade EL students by home language

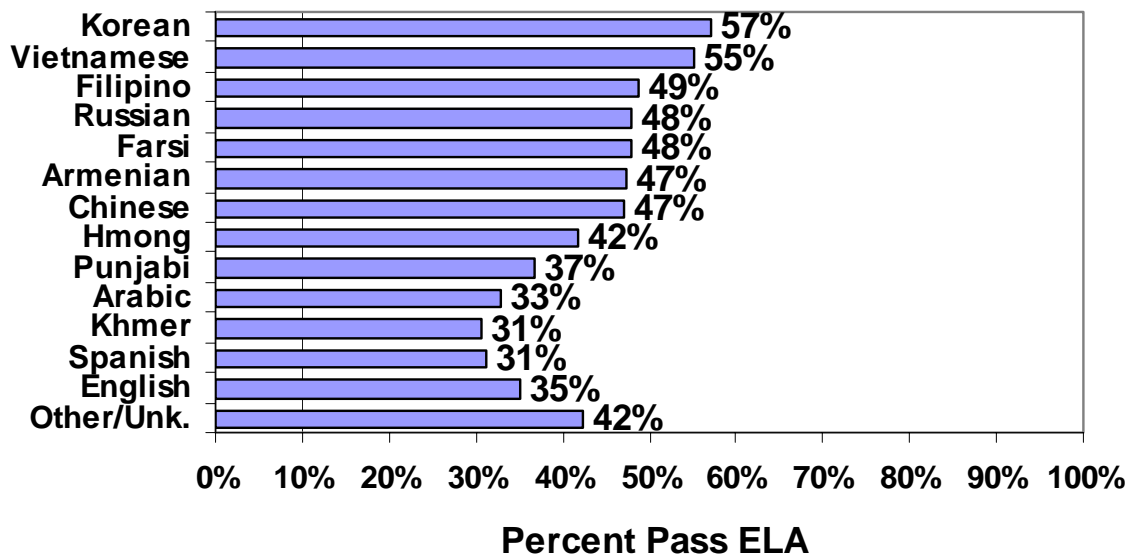


Figure 3.4. ELA passing rates for 10th grade EL students by home language

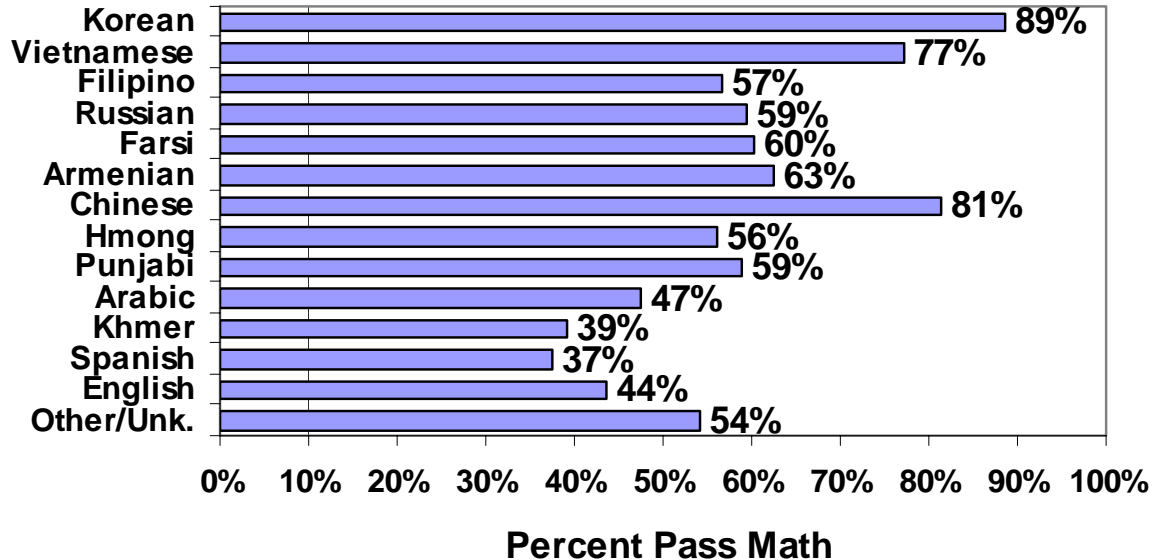


Figure 3.5. Math passing rates for 10th grade EL students by home language

There are many linguistic minorities, but most English learners speak Spanish. There were at least a dozen diverse languages spoken by a substantial number (more than 300) of the 10th grade EL students. As shown by Figure 3.3, however, Spanish was by far the dominant language spoken in the homes of EL students. More than 80 percent of 10th grade EL students indicated Spanish as their home language. We do not exactly know what to make of the EL students who reported English as their primary language, except that their relatively low ELA passing rates did indicate potential difficulties with English.

Spanish speakers had the most difficulty with the CAHSEE tests among linguistic minorities. Tenth grade EL students whose home language was Spanish had the lowest passing rates on both the ELA and mathematics tests. EL students who spoke a more linguistically complex language, such as Chinese, had some difficulty with the ELA test, but little difficulty with the mathematics test. However, it could well be that differences in passing rates were due to differences in factors other than the language spoken, such as economic conditions or parent education levels.

English Language Development Program

The answer documents contained information about the programs to learn English in which EL students participated. Schools were asked to indicate the best description of the student's program with the alternatives being:

- English language development (ELD) only
- English language development plus Specially Designed Academic Instruction in English (SDAIE)
- ELD and SDAIE with primary language support (PLS)
- ELD with other subjects taught in the student's primary language
- Some other English language program
- No ELD program

Table 3.4 shows the number of answer documents for 10th grade students indicating each program type and the ELA and math passing rates for students coded in each of the program type categories.

Table 3.4. Number of 10th Grade EL Students and CAHSEE Passing Rates by Type of EL Program

EL Program	Number of Students	Percent Pass	
		ELA	Math
ELD Only	11,760	35.5%	44.8%
ELD+SDAIE	45,117	34.4%	41.1%
ELD+SDAIE+PLS	8,226	19.8%	37.3%
ELD+Other Subjects in Primary Language	2,498	12.7%	39.0%
Other EL Program	8,428	36.3%	41.6%
None	6,690	43.5%	46.6%
Not Indicated	5,771	36.2%	41.5%

Students receiving instruction in their primary language had the lowest ELA passing rates, but their mathematics passing rates were not lower. It is, of course, not appropriate to attribute outcome differences to the program of instruction alone, without controlling for important differences in the students participating in the program. It is likely, for example, that students receiving primary language support in English language development and in other subjects were the ones having the most difficulty in English to begin with, or those newest to the system. Similarly, students with no indicated program had the highest ELA passing rates, not because no instruction was better than some but more likely because they did not need as much assistance in learning English.

Other Programs

Table 3.5 shows the number of EL students participating in other educational programs, including migrant and Indian education, programs for the gifted, and Title I.

Table 3.5. Number of 10th Grade EL Students and CAHSEE Passing Rates by Type of Program

Special Programs	Number of Students	Percent Passing	
		ELA	Math
Migrant	6,681	29.6%	43.8%
Indian	42	26.2%	28.6%
Gifted	888	64.6%	74.6%
Title I	48,286	32.7%	40.4%

More than half of the students participated in Title I and their passing rates were about the same as the rates for 10th grade EL students in general. Students who participated in migrant education programs had slightly lower ELA passing rates, but slightly higher math passing rates. Not surprisingly, students in gifted programs had much higher passing rates, but only about 1 percent of all EL students were in these programs.

EL Accommodations

The 2005–06 answer documents included new information on accommodations provided to students in taking the CAHSEE, including accommodations specifically for English learners. Table 3.6 shows the frequency with which various EL accommodations were used and CAHSEE passing rates for student receiving each of these accommodations. As described in the Test Coordinator’s Manual, the four types of accommodations offered specifically to EL students were:

- A. Hear the test directions printed in the test administration manual translated into the student’s primary language (EL: Tran. Dir)
- B. Additional supervised breaks within a testing day or within a test part (separately timed section) (EL: Spec. Brk)
- C. Have the opportunity to be tested separately with other ELs provided that the student is directly supervised by an employee of the school. (EL: Test Sep)
- D. Access to translation glossaries/work lists, not including definitions or formulas (EL: Tran. Glos).

Table 3.6. Number of 10th Grade EL Students and CAHSEE Passing Rates Receiving EL Accommodations

EL Accommodations	Number of Students	Percent Passing	
		ELA	Math
Directions in Primary Language	2,731	15.8%	38.2%
Special Breaks	551	22.7%	45.6%
Tested Separately	2,822	17.4%	40.2%
Translation Glossary	2,074	16.7%	42.1%

Student requiring EL accommodations had lower ELA passing rates compared to other EL students, but nearly the same passing rates for mathematics. EL accommodations were indicated for a relatively small proportion of the 10th grade EL students taking the CAHSEE. Those that did receive accommodations had relatively low ELA passing rates, ranging from 15 percent to 25 percent, even with the accommodation. In all cases but Directions in Primary Language, the mathematics passing rates were above 40 percent.

Comparison of Recent versus Earlier Enrollees

Table 3.7 compares characteristics of students who were enrolled as English learners within the past 7 years and students who have been enrolled for more than 7 years. Students more recently enrolled were slightly less likely to be Hispanic and more likely to be Asian or White, non-Hispanic. Students enrolled for more than 7 years were somewhat more likely to be economically disadvantaged (80 percent compared to 76 percent) and decidedly more likely to be enrolled in special education programs (20 % compared to 6 %) and to be coded as having a Specific Learning Disability. Finally, more recently enrolled EL students were more likely to be receiving primary language support, while earlier enrollees were more likely to be in SDAIE programs or to be receiving other EL services.

Table 3.7. Characteristics of Students with Recent and Earlier EL Enrollment Dates.

Characteristic	Enrolled in the Last 7 Years	Enrolled More than 7 Years	Difference
Number of Students	35,808	55,792	
<i>Gender and Race/Ethnicity</i>			
Percent Male	54.0%	55.8%	1.8%
Percent Hispanic	74.9%	89.0%	14.1%
Percent Asian	15.1%	7.5%	-7.6%
Percent White, Non-Hispanic	4.8%	1.6%	-3.2%
<i>Primary Language</i>			
Primary Language: Spanish (01)	74.5%	88.8%	14.3%
Primary Language: Hmong (23)	0.9%	2.4%	1.5%
Primary Language: Vietnamese (02)	2.5%	1.2%	-1.3%
Chinese, Korean, Filipino	9.9%	1.8%	-8.1%
<i>Economically Disadvantaged or in Special Education Programs</i>			
Percent Economically Disadvantaged	75.7%	79.8%	4.1%
Percent Special Education	6.1%	19.6%	13.4%
Percent Specific Learning Disability	3.7%	14.9%	11.2%
<i>English Learner Program</i>			
Percent SDAIE (2)	44.4%	55.1%	10.7%
EL+SDAIE with Prim. Lang. Support (3)	17.5%	4.6%	-12.8%
EL+Acad. Support in Primary Lang (4)	5.8%	0.8%	-5.0%
Other EL Services (5)	6.7%	11.2%	4.4%
No EL Program Participation (6)	5.1%	9.8%	4.7%

Results for Reclassified Fluent English Proficient Students

Next we examined results for 10th grade students who had been reclassified as having fluent English proficiency (RFEP).

Reclassification Date

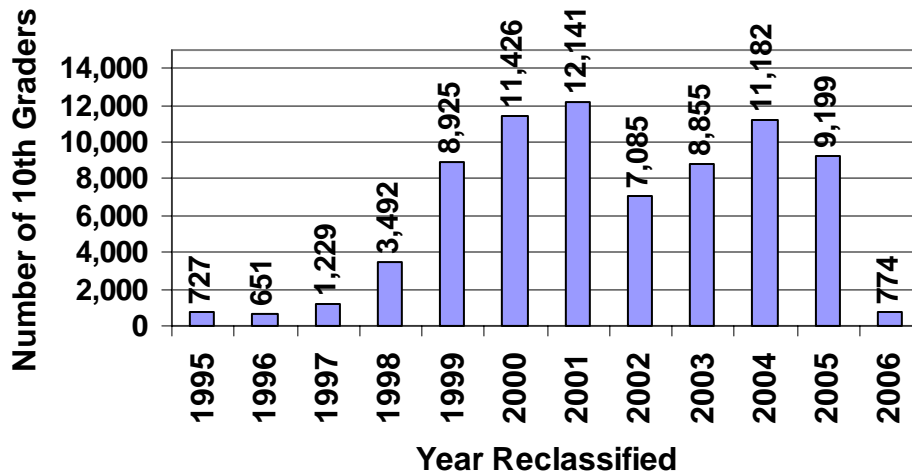
We examined the year of reclassification for RFEP students. Table 3.8 shows the number of 10th grade EL students and their ELA and mathematics passing rates for each year of enrollment. This information is displayed graphically in Figures 3.6 (number of students) and 3.7 (CAHSEE passing rates). Reclassification dates span a range from 1995 (kindergarten for most of these 10th graders) through the present. There was a decided dip in the number of students reclassified in 2002, which may have been related to the introduction of new reclassification policies based on the California English Language Development Test (CELDT).

Reclassified students did slightly better on the ELA test than on the math test. Similar to students in general, RFEP students had higher passing rates on the ELA test than on the math test. Passing rates for RFEP students were considerably higher than the passing rates for EL students, particularly on the ELA test.

Table 3.8. Number of RFEP Students and CAHSEE Passing Rates by Year of Reclassification

Year Reclassified	Estimated Grade Level	Number of Students	Percent Passing	
			ELA	Math
Invalid		263	49.8%	44.5%
1995	K	727	82.9%	76.3%
1996	K	651	87.1%	83.3%
1997	1	1,229	85.8%	85.0%
1998	2	3,492	85.7%	83.3%
1999	3	8,925	85.7%	82.3%
2000	4	11,426	83.2%	78.8%
2001	5	12,141	82.0%	78.1%
2002	6	7,085	85.5%	82.9%
2003	7	8,855	85.0%	81.3%
2004	8	11,182	83.1%	79.7%
2005	9	9,199	80.3%	77.9%
2006	10	774	74.9%	70.5%
Total		75,494	83.8%	80.4%

Note. Estimated grade level is based upon normal grade progression and 10th grade status in 2005–2006, assuming no grade retention or skipped grade. This is a rough group-level estimate only and does not take into account month of enrollment.

**Figure 3.6. Number of 10th grade RFEP students by year of reclassification**

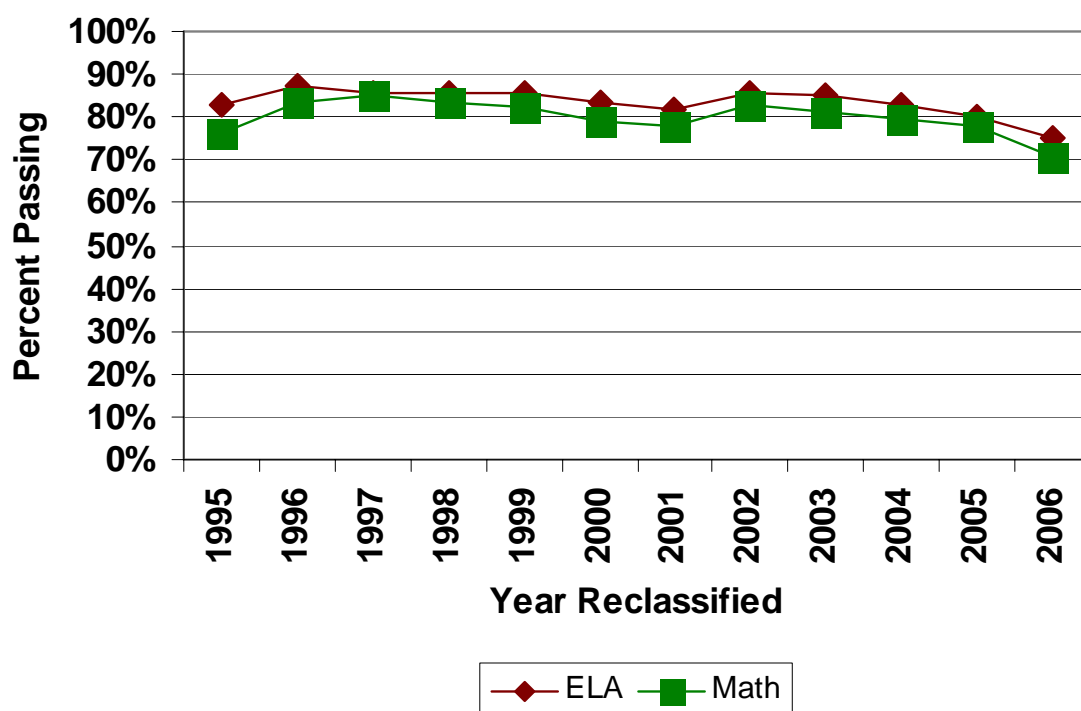


Figure 3.7. CAHSEE passing rates for 10th grade RFEP students by year of reclassification

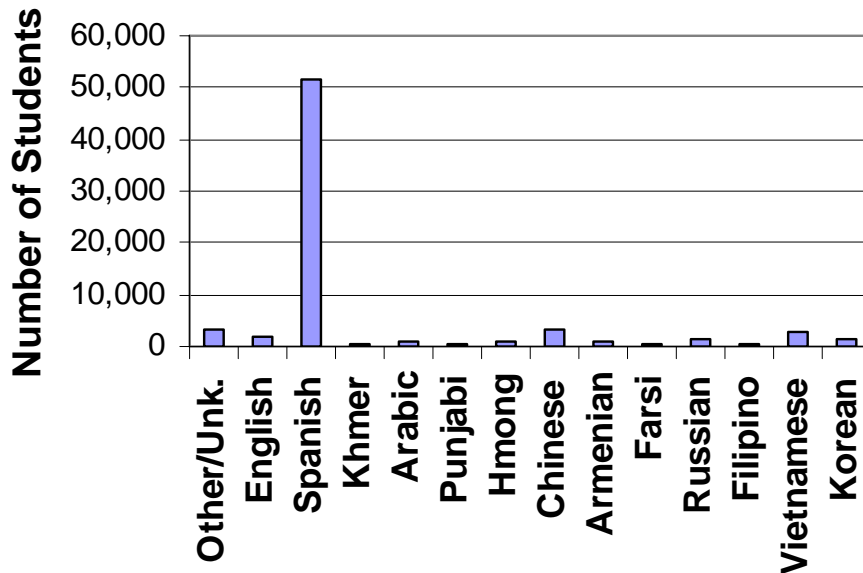
Recently reclassified students performed less well. Tenth grade students reclassified in 2005 and particularly in 2006 had lower ELA passing rates (below 80%) compared to students who had been enrolled for longer periods. Passing rates for students reclassified in the last 6 years are lower for both subjects than the passing rates for students reclassified before 2000.

Home Language

The home language of RFEP students was recorded on the CAHSEE answer documents. Table 3.9 shows the number of students and CAHSEE passing rates for different home languages. Only languages with at least 300 10th grade students are shown; the remaining languages are grouped under “other.” We also combined two separately coded Chinese dialects (Mandarin and Cantonese) as passing rates for these two dialects were similar. Except for Other and English, the categories are ordered by their ELA passing rates for EL students. Figures 3.8 through 3.10 show the numbers and passing rates graphically.

Table 3.9. Number of 10th Grade RFEP Students and CAHSEE Passing Rates by Home Language

Home Language	ELA		Math	
	N	% Pass	N	% Pass
Other/Unknown	3,426	93.90%	3,443	92.48%
English	1,931	91.04%	1,943	89.35%
Spanish	51,465	87.02%	51,739	81.60%
Arabic	342	90.35%	342	90.35%
Khmer	906	89.62%	903	88.26%
Punjabi	428	96.03%	425	94.35%
Hmong	1,015	93.00%	1,017	92.53%
Chinese	3,079	97.95%	3,077	98.86%
Armenian	1,129	92.03%	1,125	91.82%
Farsi	412	94.66%	407	95.33%
Filipino	1,639	95.00%	1,648	93.75%
Russian	503	97.42%	505	96.63%
Vietnamese	2,780	97.41%	2,789	98.06%
Korean	1,555	98.26%	1,554	98.91%

**Figure 3.8. Number of 10th Grade RFEP students by home language**

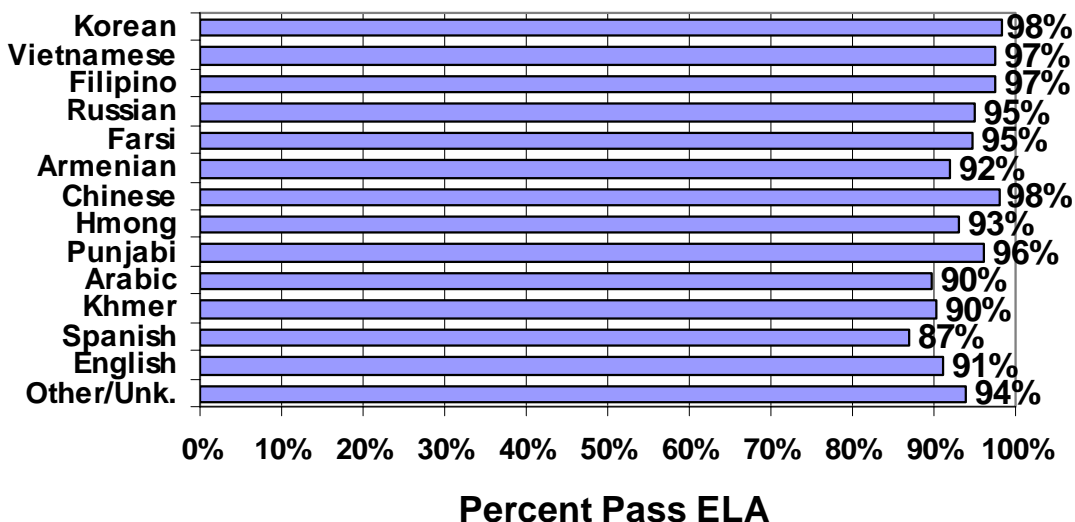


Figure 3.9. ELA passing rates for 10th Grade RFEP students by home language

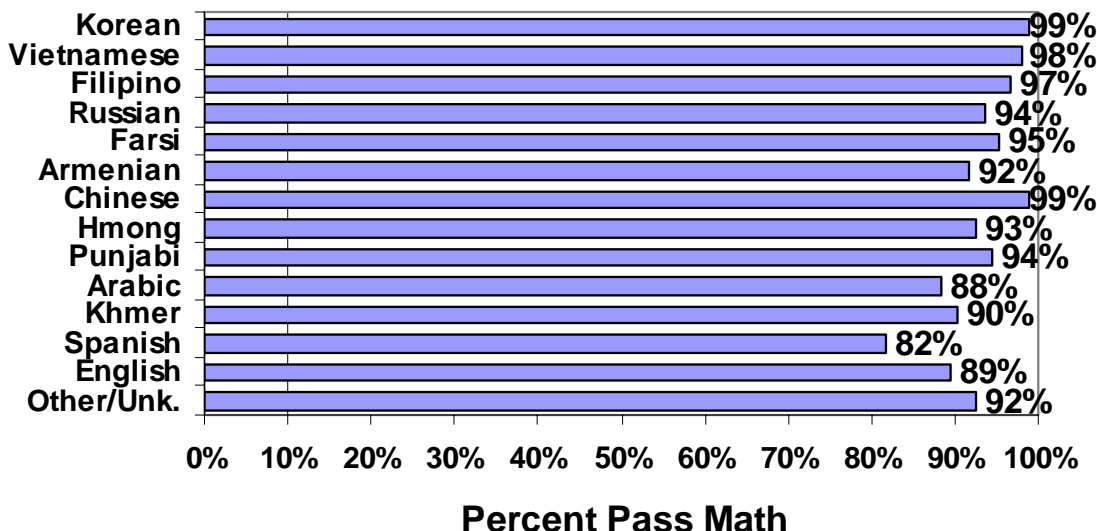


Figure 3.10. Math passing rates for 10th Grade RFEP students by home language

There are nearly as many RFEP students as EL students and most speak Spanish. At least a dozen diverse languages were spoken by a substantial number (more than 300) of the 10th grade RFEP students. As shown by Figure 3.8, however, Spanish was by far the dominant language spoken in the homes of EL students. More than 80 percent of 10th grade RFEP students indicated Spanish as their home language.

Overall, 10th grade RFEP students did well on the CAHSEE; those who spoke Spanish did slightly less well. Tenth grade RFEP students whose home language was

Spanish had the lowest passing rates (among RFEP students) on both the ELA and mathematics tests. EL students who spoke a more linguistically complex language, such as Chinese, had no further difficulty with the ELA test and continued to perform very well on the mathematics test. Again, however, it should be noted that differences in passing rates could be due to differences in factors other than the language spoken, such as economic conditions or parent education levels.

English Language Development Program

As shown in Table 3.10, an English language development program was indicated for relatively few RFEP students. There is, of course, no reason to expect that RFEP students would still be enrolled in an English language development program. It might be useful to know what program they were enrolled in prior to reclassification, but that information is not available.

Table 3.10. Number of 10th Grade RFEP Students and CAHSEE Passing Rates by Type of EL Program

EL Program	ELA		Math	
	N	% Pass	N	% Pass
ELD Only	528	86.17%	529	86.77%
ELD+SDAIE	1,064	87.41%	1,066	83.68%
SDAIE+PLS	585	86.84%	583	82.68%
Other PLS	20	85.00%	20	90.00%
Other EL Program	698	92.69%	692	88.87%
None	8,840	89.79%	8,855	88.35%
Not Indicated	59,619	89.45%	59,908	84.64%

Other Programs

Table 3.11 shows the number of RFEP students participating in other educational programs, including migrant and Indian education, programs for the gifted, and Title I.

Table 3.11. Number of 10th Grade RFEP Students and CAHSEE Passing Rates by Type of Program

Special Programs	ELA		Math	
	N	% Pass	N	% Pass
Migrant	3,357	86.18%	3,359	85.59%
Indian	130	93.08%	132	87.12%
Gifted	9,177	98.68%	9,179	98.53%
Title I	35,050	86.83%	35,322	81.40%

Roughly half of the RFEP students participated in Title I. Their passing rates were slightly lower than for other RFEP students, but much higher than for Title I students in general. RFEP students in migrant and Indian education programs did very well on the CAHSEE. Not surprisingly, students in gifted programs had much higher passing rates, but only just over 1 percent of all RFEP students were in these programs.

EL Accommodations

The 2005–06 answer documents included new information on accommodations provided to students taking the CAHSEE, including accommodations for RFEP students. Table 3.12 shows the frequency with which various accommodations were used and CAHSEE passing rates for student receiving each of these accommodations.

Table 3.12. Number of 10th Grade RFEP Students and CAHSEE Passing Rates Receiving EL Accommodations

EL Accommodations	ELA		Mathematics	
	N	% Pass	N	% Pass
EL: Tran. Dir.	151	88.08%	149	79.87%
EL: Spec. Break	8	N/R	8	N/R
EL: Test Sep.	210	87.14%	203	82.76%
EL: Tran. Gloss	80	86.25%	77	89.61%

Note. Percentage passing is not reported (N/R) for categories with small n's.

Virtually none of the RFEP students required EL accommodations. In fact, it was not clear that RFEP students were eligible to receive EL accommodations, so the numbers indicated in Table 3.12 may have resulted from errors in coding either RFEP status or the accommodations provided. If so, this would mean an error rate of about 0.3 percent, a rate that would not affect main conclusions from our analyses.

Results for Students in Special Education Programs

One of the most vexing problems for the CAHSEE has been the low passing rate for students with disabilities. As noted in Chapter 1, prior evaluation reports have highlighted particular difficulties in meeting the CAHSEE requirement faced by students in special education programs. We have several times recommended consideration of alternatives for these students. In 2004, the California legislature passed Senate Bill (SB) 964, calling for a panel to identify options or alternatives for students in special education program and requiring a contractor to support the work of this panel and report on options that are identified.

Pursuant to requirements of SB 964, a report was submitted to the California legislature in spring 2005 recommending alternative graduation assessments and requirements for students receiving special education services (Rabinowitz, Crane, Ananda, Vasudeva, Youtsey, Schimozato, & Schwager, April 2005). The SB 964 report identified three types of options for students receiving special education services. First, there are options for *alternate forms of testing* to be sure students receiving special education services have adequate opportunities to demonstrate what they know and can do. Second, there are options for *modifying the CAHSEE requirement*. The main recommendation in this area, to defer the requirement for students receiving special education services, is based on the premise that instructional opportunities have not been adequate to provide sufficient opportunity for students receiving special education

services to learn the required material. The deferral is also recommended to allow time to develop alternative requirements, such as coursework, that special education students might pass in order to receive a diploma. Finally, there are options concerning *alternative types of diplomas* for students who are not able to demonstrate full mastery of the CAHSEE standards.

Our 2005 CAHSEE evaluation report described efforts to investigate characteristics of students in this population and the types of services that they received in relation to success in passing the CAHSEE (Wise, et al., 2005b, Chapter 7). The primary results from that investigation were:

1. Nearly half of the students in special education programs receive relatively non-intensive services (e.g., in-class accommodations, resources specialists) and participate in the regular curriculum 80 percent of the time or more. About half of these students pass the CAHSEE on the first try and, perhaps with additional time and resources, the others are capable of passing and should be held to the CAHSEE requirement.
2. About one-quarter of the students in special education programs require more intensive assistance (e.g., special day programs) and spend less than 50 percent of their time in regular instruction. Very few of these students are able to pass the CAHSEE. Other goals may be more appropriate for these students. It is worth noting, however, that 10 percent of the students in this category do pass the CAHSEE, so expectations for meeting the CAHSEE requirement should not lightly be abandoned.

Efforts to match additional data on special education students to their CAHSEE results were repeated in 2006. The approach, analyses, and, for the most part, results parallel the 2005 efforts reported last year.

Supplemental Data on Students Receiving Special Education Services

A first step in our analysis was to gather and analyze more information on differences in special education services and the degree to which students receiving these various services are having difficulty passing the CAHSEE. To this end, CDE again provided data from the California Special Education Management Information System (CASEMIS). Two files were provided, one containing data from December 2005 and the other containing data from June 2005. The results reported here focus on the December 2005 CASEMIS data as these data are the most recent and also closer to the time of 2006 CAHSEE testing.

Neither the CAHSEE nor the CASEMIS files contained a unique and reliable student identifier. Several passes were made to match the files using school code, name, birth date, sex, special education status, and English learner status. In the first pass, all of the CASEMIS data (including grade levels) was matched to all of the CAHSEE results for a given grade (including students not flagged as special education). A relatively strict criterion was used in accepting matches to minimize the number of

false matches. In subsequent passes, the unmatched cases were limited to those for which a match should exist. For the CASEMIS, this meant only unmatched cases in the target grade. For the CAHSEE, only unmatched cases flagged as special education students were used. A less strict criterion was used for accepting matches to reduce the number of false non-matches.

Table 3.13 shows the number of records from the December 2005 CASEMIS data that were matched to the 2006 CAHSEE 10th, 11th, and 12th grade results. Overall, 85 percent of the 10th grade CASEMIS records were matched to CAHSEE records. In a relatively small number of cases, these students were shown as 11th graders at the time of the CAHSEE administration several months later. The match rates were lower for 11th and 12th grade students in the CASEMIS file (69 and 54 percent respectively). This is not surprising, since many 11th and 12th grade student had already passed the CAHSEE and did not participate in the 2006 testing. Again, the grade level shown on the CAHSEE test records was sometimes different from the grade level on the CASEMIS records. Where they were different, we used the grade shown at the time of CAHSEE testing in our analyses.

Table 3.13. Number of Students in the Matched CAHSEE-CASEMIS Files by Grade on Each File

Grade on CAHSEE File (Winter/Spring 2006)	Grade According to December 2005 CASEMIS File					
	9*	10	11	12	Adult	Total
Original number of CASEMIS records	57,654	50,992	44,762	40,382	1,556	195,346
Number of Matched Records by Grade on CAHSEE File						
Grade 10	1,569	41,166	896	158	3	43,792
Grade 11	172	2,331	28,974	1,085	10	32,572
Grade 12	36	451	1,881	21,789	21	24,178
Unknown	-	1	24	14	-	39
Total Records Matched	1,777	43,949	31,775	23,046	34	100,581
Percent of CASEMIS Records Matched	3.2%	84.7%	69.2%	54.0%	2.7%	51.1%

* Note. When matched, these were 9th grade students in the CASEMIS data file who were 10th graders in the CAHSEE data file.

Passing Rates for Students Receiving Different Special Education Services

We examined a number of variables describing the nature and extent of provided special education services and some characteristics of the students receiving these services. The first variable indicated the percentage of time the student was outside the general education class to receive special education instruction or services during the school day. Table 3.14 shows that 10th grade students in 2005 and 2006 who were away from the general education class more than 50 percent of the time were much less likely to pass the CAHSEE as 10th graders than students who were not removed from regular instruction as much.

Table 3.14. Number of 10th Grade Students and Percent Passing by Time Away from Regular Instruction (2005 and 2006 Students with CASEMIS Data)

Percent of Time Away from Regular Instruction	ELA				Math			
	Number of Students		Percent Passing CAHSEE ELA		Number of Students		Percent Passing CAHSEE Math	
	2005	2006	2005	2006	2005	2006	2005	2006
None	1,796	3,113	48.7%	44.2%	1,806	3,116	46.6%	36.5%
01 to 19 Percent	11,637	11,600	51.5%	50.5%	11,630	11,572	49.1%	46.7%
20 to 33 Percent	6,569	6,053	32.5%	34.5%	6,570	6,037	29.0%	30.8%
34 to 50 Percent	5,900	5,742	23.8%	25.3%	5,889	5,747	20.0%	21.3%
51 to 89 Percent	9,965	9,763	9.8%	10.5%	9,919	9,708	8.7%	9.0%
90 to 99 Percent	308	293	22.1%	28.3%	307	295	20.5%	24.8%
100 Percent	1,429	1,679	28.3%	30.1%	1,388	1,667	22.6%	22.4%
All Special Education Students	37,604	38,243	31.5%	32.4%	37,509	38,142	29.0%	28.7%

Note. Numbers differ for the ELA and mathematics tests because some students only took one of the tests.

As shown in Table 3.14, more than one-third of students receiving special education services are able to spend at least 80 percent of their day in regular instruction. Over half of these students passed the CAHSEE ELA requirement in the 10th grade and very nearly half passed the mathematics requirement. Except at the extreme, CAHSEE passing rates declined as students spent more time outside of regular instruction. Fewer than 10 percent of students who are in regular instruction at least 10 percent but less than 50 percent of the time were able to pass the ELA requirement and even fewer passed the mathematics requirement. As shown below, students who participated in regular instruction less than half of the time were likely to be receiving different types of services. Some of these students may have participated in an alternate curriculum that was as rigorous as the regular curriculum.

Table 3.15 shows the number of 10th grade students in 2005 and 2006 that received different types of services and their rate of passing. The first three categories shown are relatively non-intensive and about 40 percent of the students receiving these services were able to pass the CAHSEE ELA or math tests. Well over half of the students with disabilities received one or more of these services. At the same time, over a quarter of the students with disabilities taking the CAHSEE were in special day programs in public integrated facilities. Only about 10 percent of these students were able to pass the CAHSEE tests.

Table 3.15. Number of Students and Percent Passing by Type of Service Received (Matched 2006 10th Grade Students)

Type of Service	ELA				Math			
	Number of Students		Percent Passing CAHSEE ELA		Number of Students		Percent Passing CAHSEE Math	
	2005	2006	2005	2006	2005	2006	2005	2006
Reg. Class Accom.	803	1,261	38.9%	42.6%	799	1,250	39.1%	38.2%
Learning Center	1,766	1,389	45.0%	45.8%	1,754	1,393	39.3%	41.6%
Resource Specialist	21,339	22,114	39.9%	40.5%	21,362	22,090	37.1%	36.4%
Spec. Day Inclusion	181	257	20.4%	25.3%	174	247	23.0%	15.4%
Integrated Day Fac.	11,758	11,527	11.2%	11.1%	11,674	11,472	9.5%	8.9%
Separate Day Fac.	203	239	32.0%	30.1%	196	236	20.4%	21.6%
Language & Speech	4,262	4,605	26.5%	28.3%	4,247	4,596	28.3%	28.6%
Vocational Education	2,413	3,308	25.5%	24.6%	2,447	3,314	23.7%	21.1%
Indiv./Small Group	826	1,003	34.3%	32.6%	813	993	28.2%	29.0%
Vision Services	156	214	55.1%	56.1%	157	216	49.7%	49.5%
Psych. Services	846	918	34.0%	38.2%	852	922	28.5%	31.1%
Transport. Services	1,428	1,534	27.5%	27.8%	1,407	1,531	22.4%	23.1%
Other Services	8,182	9,726	29.5%	30.1%	8,146	9,690	25.6%	25.4%
All Special Education Students	37,604	38,243	31.5%	32.4%	37,509	38,142	29.0%	28.7%

Note. Students may have received more than one type of service.

Table 3.16 shows the relationship of the type of service received and the percent of time away from regular general education instruction. The majority of students receiving the first three types of services were away from regular instruction less than half, and in most cases less than 20 percent of the time. This was also true of students receiving vision services. By contrast, most students in special day programs were receiving general education instruction less than half the time. Results in Table 3.14 above, indicate that students away from instruction 51 to 89 percent of the time had the lowest passing rates. As shown in Table 3.16, these are predominantly students in special day programs in public integrated facilities. Students in day programs in separate facilities received separate instruction nearly all of the time. They were away from general education instruction over 90 percent of the time. These students passed the CAHSEE at somewhat higher rates than students in integrated facilities, although the passing rates were still quite low.

Table 3.16. Percent of Time Outside Regular Instruction by Type of Service Received (Matched 2005 10th Grade Students)

Type of Service	Year	Percent of time Away from Regular Instruction			
		< 20%	21%-50%	51%-89%	90%-100%
Regular Class with Accommodation	2005	49.8%	28.9%	18.9%	2.4%
	2006	50.2%	29.7%	18.6%	1.6%
Non-intensive program (learning center)	2005	61.1%	33.3%	5.1%	0.5%
	2006	59.5%	33.5%	6.0%	1.1%
Resource Specialist (Non-intensive)	2005	48.5%	44.7%	6.1%	0.7%
	2006	51.9%	41.1%	6.2%	0.8%
Special Day Inclusion Services	2005	24.6%	32.8%	36.1%	6.7%
	2006	26.6%	29.7%	35.9%	7.8%
Special Day in Public Integrated Facility	2005	5.2%	17.3%	71.1%	6.4%
	2006	6.0%	15.4%	68.7%	10.0%
Special Day in Public Separate Facility	2005	7.1%	5.7%	21.8%	65.4%
	2006	7.0%	3.2%	13.9%	76.0%
Language and Speech	2005	32.9%	26.5%	34.6%	6.0%
	2006	29.4%	20.3%	37.6%	12.8%
Vocational Education Training	2005	34.0%	32.4%	31.1%	2.5%
	2006	35.4%	23.2%	34.3%	7.2%
Individual and Small Group Instruction	2005	35.8%	38.9%	12.9%	12.4%
	2006	34.9%	29.0%	17.3%	18.7%
Vision Services	2005	47.0%	27.4%	21.3%	4.3%
	2006	39.9%	14.7%	22.5%	22.8%
Psychological Services	2005	33.0%	23.1%	30.6%	13.3%
	2006	38.2%	19.1%	28.5%	14.3%
Transportation Services	2005	11.5%	13.1%	43.4%	32.0%
	2006	10.2%	8.9%	41.4%	39.5%
Other Services	2005	30.4%	27.3%	30.7%	11.6%
	2006	31.0%	17.8%	31.9%	19.2%
All Students Receiving Special Education Services	2005	35.5%	33.1%	26.7%	4.7%
	2006	35.8%	28.7%	27.6%	7.9%

Note. Row percents add to 100% except for rounding. Bolded numbers indicate percents more than 8 percentage points above column average.

Table 3.17 shows the number and percent of matched 10th grade students in each primary disability category and the ELA and math passing rates for students in each of these categories. The vast majority of students with disabilities in the matched sample had specific learning disability as their primary disability code. These students passed the CAHSEE at relatively low rates, slightly below the average for all students in the matched sample. Students with vision, hearing, speech, or other health impairments passed the CAHSEE at relatively higher rates. Almost none of the students coded as having mental retardation passed the CAHSEE. These students are underrepresented in this matched sample, because many students coded in this category on the CASEMIS file did not take the CAHSEE at all.

Table 3.17. Primary Disability Codes for 10th Grade Students Receiving Special Education Services with CAHSEE Success Information

Primary Disability Category	Percent of Students with Disabilities in the Category		Percent Passing CAHSEE ELA		Percent Passing CAHSEE Math	
	2005	2006	2005	2006	2005	2006
010 = Mental Retardation	2.1%	1.7%	2.7%	3.3%	1.7%	2.2%
020 = Hard of Hearing	1.0%	0.9%	41.6%	47.6%	43.3%	47.3%
030 = Deaf	0.5%	0.6%	19.8%	17.9%	31.1%	27.6%
040 = Speech/Lang. Impairment	4.8%	6.5%	37.1%	50.1%	38.7%	51.6%
050 = Visual Impairment	0.5%	0.5%	62.4%	55.8%	53.2%	55.1%
060 = Emotional Disturbance	5.6%	7.6%	47.2%	42.1%	37.3%	33.1%
070 = Orthopedic Impairment	0.9%	0.8%	45.0%	54.6%	37.2%	49.0%
080 = Other Health Impairment	5.8%	6.3%	53.1%	55.0%	45.8%	49.3%
090 = Specific Learning Disability	77.3%	73.1%	28.6%	30.6%	26.5%	29.1%
100 = Deaf-Blindness	0.0%	0.0%				
110 = Multiple Disabilities	0.2%	0.3%	22.9%	36.5%	22.2%	36.6%
120 = Autism	1.1%	1.5%	50.6%	56.5%	51.6%	56.4%
130 = Traumatic Brain Injury	0.2%	0.2%	23.2%	28.6%	26.0%	28.7%
Number of Matched Students	38,602	40,395	31.6%	34.6%	29.0%	32.6%

Note. Only students taking the CAHSEE are included. Approximately 75 percent of students coded Mental Retardation and 65 percent of students coded Multiple Disabilities did not take the CAHSEE.

Results for Students Receiving Special Education Services Who Retested in 11th and 12th Grade

We also matched 11th and 12th grade students in the December 2005 CASEMIS file with CAHSEE results from the 2005–2006 administrations. In 2006, as in 2005, we had CASEMIS information on special education services and CAHSEE data from the student's initial attempt in the 10th grade and retest(s) in the 11th grade for more than 20,000 students. We also had CASEMIS data and CAHSEE test scores from 11th grade in the 2004–05 administrations and 12th grade in 2005–06 administrations for 14,000 students.

Table 3.18 shows the average prior-year score and retest gain score for students by the percent of time students were away from regular instruction during the day. The prior-year scores indicate how close they were to passing in 2005 and the gain scores indicate how much they learned between 2005 and 2006. As with 10th grade passing rates, students who were away from regular instruction over half of the time had initial scores that were considerably lower than those of students who were away from regular instruction less than 20 percent of the time and also showed considerably smaller gains from 2005 to 2006. This was true for 12th grade students in 2006 as well as for 11th grade students in both 2005 and 2006.

Both the initial scores and score gains were similar for this years 11th and 12th graders. Eleventh graders in 2005 who had high initial scores and/or large score gains were likely to have passed and thus not be included in the 2006 12th grade administrations. Average gain score for both 11th and 12th graders were nearly half the

difference between the prior-year average and the passing level of 350 (average gains of 12 to 14 points in ELA compared to a 24- or 25-point deficit and 10- or 11-point gains in mathematics compared to a 20-point deficit). At these rates of gain, it would take about two years for the average score for students in the top two categories to exceed 350, while it would take four to six years for score averages for students in the bottom two categories to reach this level.

Table 3.18. Number of Students, Average Prior Year Scores, and Average Score Gain by Time Away from Regular Instruction (2005 11th Grade and 2006 11th and 12th Grade Students)

Percent of Time Away from Regular Instruction	Number of Matched Students			Average Prior Year Score (How Close to Passing)			Average Gain		
	2005	2006	2006	2004	2005	2005	2005	2006	2006
	Grade 11	Grade 11	Grade 12	Grade 10	Grade 10	Grade 11	Grade 11	Grade 11	Grade 12
ELA									
< 20%	6,022	6,428	3,664	325.6	325.4	324.1	14.3	12.0	11.6
20–50%	7,720	7,151	4,746	320.3	320.7	320.4	12.4	10.5	9.7
51–89%	7,216	7,330	4,962	309.7	310.1	310.6	7.3	7.1	6.3
90–100%	977	1,119	896	310.4	311.0	309.7	9.7	8.0	8.6
All Special Education Students (Std. Dev)	21,935	22,028	14,268	317.9 (18.6)	318.1 (19.4)	317.3 (19.4)	11.2 (21.0)	9.7 (21.2)	8.9 (23.6)
Mathematics									
< 20%	5,937	6,762	4,013	330.4	327.9	328.0	9.7	11.4	11.3
20–50%	7,853	7,612	5,028	326.5	324.8	325.7	8.1	10.5	9.2
51–89%	7,208	7,441	5,096	319.3	318.7	319.4	4.4	6.3	6.0
90–100%	1,033	1,206	957	320.6	319.6	320.2	6.1	7.6	6.3
All Special Education Students (Std. Dev)	22,031	23,021	15,094	324.9 (13.7)	323.5 (13.2)	323.8 (13.3)	7.2 (17.5)	9.3 (17.3)	8.5 (18.6)

Note. Numbers differ for the ELA and mathematics tests because some students took only one of the tests. For all matched students, the standard deviations of the prior year scores and the gains are shown in parentheses

Tables 3.19 and 3.20 show average prior-year scores and average gain scores for students receiving various special education services. Results for the two most frequent types of service are quite different. More than 11,000 students in this matched sample were provided with a resource specialist. These students had relatively high initial score averages (324 for ELA and 327 to 329 for mathematics) and relatively high score gains between 2005 and 2006. There were also more than 8,000 students in special day programs in public integrated facilities. Initial score averages for these students were quite low, (310 for ELA and 319 for mathematics) and they had much lower average score gains.

Table 3.19. Number of Students, Average Prior Year ELA Score, and Average ELA Score Gain by Type of Service Received (2005 11th Grade and 2006 11th and 12th Grade Students)

Type of Service	Number of Matched Students			Average Prior Year Score (How Close to Passing)			Average Gain		
	2005 Grade 11	2006 Grade 11	2006 Grade 12	2004 Grade 10	2005 Grade 10	2005 Grade 11	2005 Grade 11	2006 Grade 11	2006 Grade 12
Reg. Class Accom.	485	612	385	320.4	321.5	319.2	11	11.1	9.7
Learning Center	873	742	449	323	323.3	322.8	13.9	9.0	8.7
Resource Specialist	11,582	11,363	6,718	323.5	324.3	323.7	13.5	11.5	11.0
Spec. Day Inclusion	89	165	107	316.9	314.1	312.6	5.3	6.8	11.1
Integrated Day Fac.	8,381	8,537	6,187	309.3	309.5	310.4	7.7	7.2	6.4
Separate Day Fac.	81	136	106	312	308.9	311.9	17.9	10.1	7.4
Language & Speech	2,359	2,461	1,432	314.7	314.4	315.2	9.8	8.8	8.0
Vocational Education	2,636	3,794	2,489	316.2	316.6	317.1	10.5	9.8	9.6
Indiv./Small Group	420	594	398	318.9	319.0	315.7	10.7	9.3	11.0
Vision Services	58	65	45	312.8	316.2	314.8	12	12.8	14.0
Psych. Services	410	445	300	314.6	316.2	314.8	11	10.5	11.4
Transport. Services	773	853	540	310.8	311.4	310.4	9.4	9.5	8.9
Other Services	4,608	5,552	3,444	315.5	315.4	314.8	10.8	9.3	10.3
All Special Education Students (Std. Dev)	21,935	22,028	14,268	317.9 (18.6)	318.1 (19.4)	317.3 (19.4)	11.2 (21.0)	9.7 (21.2)	8.9 (23.6)

Note. Column numbers sum to more than total because students may have received more than one type of service. (The average number of services per student was 1.5)

Table 3.20. Number of Students, Average Prior Year Mathematics Score, and Average Mathematics Score Gain by Type of Service Received (2005 11th Grade and 2006 11th and 12th Grade Students)

Type of Service	Number of Matched Students			Average Prior Year Score (How Close to Passing)			Average Gain		
	2005	2006	2006	2004	2005	2005	2005	2006	2006
	Grade 11	Grade 11	Grade 12	Grade 10	Grade 10	Grade 11	Grade 11	Grade 11	Grade 12
Reg. Class Accom.	446	627	416	325.9	326.8	326.3	7.1	9.4	7.4
Learning Center	880	793	537	328.8	326.7	326.5	8.3	10.3	8.9
Resource Specialist	11,615	12,031	7,240	328.8	326.9	327.7	9.0	11.3	10.7
Spec. Day Inclusion	95	163	110	323.7	319.5	319.9	6.9	7.4	9.9
Integrated Day Fac.	8,386	8,705	6,362	319.1	318.4	319.4	4.5	6.5	5.7
Separate Day Fac.	102	156	113	323.0	319.1	321.2	7.2	9.7	5.3
Language & Speech	2,272	2,407	1,410	322.9	321.8	322.8	7.2	9.1	7.5
Vocational Education	2,674	3,999	2,667	323.7	322.4	322.9	6.1	8.5	8.8
Indiv./Small Group	423	622	440	325.2	324.5	323.9	7.4	8.7	8.8
Vision Services	71	76	51	324	321.8	323.0	9.5	7.3	14.8
Psych. Services	429	471	326	322.1	322.5	322.3	7.2	10.6	6.9
Transport. Services	785	887	587	320.3	320.0	320.2	6.3	6.9	8.0
Other Services	4,771	5,944	3,717	323.6	322.2	322.3	6.5	8.2	9.5
All Special Education Students (Std. Dev)	21,935	22,028	14,268	317.9 (18.6)	318.1 (19.4)	317.3 (19.4)	11.2 (21.0)	9.7 (21.2)	8.9 (23.6)

Note. Column numbers sum to more than total because students may have received more than one type of service. (The average number of services per student was 1.5)

Accommodations and Modifications

The CAHSEE allows a number of accommodations for students who need them. In addition, some students take the CAHSEE with modifications specified in their IEPs, even though these modifications invalidate their scores. Students who test with modifications and score above the passing level are allowed to petition for a waiver from the CAHSEE requirement. Tables 3.21 and 3.22 list the various accommodations and modifications recorded for the CAHSEE ELA and mathematics tests. Each table shows the number of 10th, 11th, and 12th grade students receiving each type of accommodation or modification and the percentage of these students who score 350 or better on the corresponding CAHSEE test.

For ELA, the most frequent accommodation was supervised break and the most frequent modification was oral presentation. For mathematics, supervised break was also the most frequent accommodation and use of a calculator the most frequent modification. For both tests, a very few students took a Braille version, but passing rates for these students were close to the passing rates for all students. For students receiving a modification, relatively few scored 350 or better.

Table 3.21. Frequency of Accommodations and Modifications and Percent Scoring 350 or More: ELA

Answer Sheet Code	Data Base Code	Description of Accommodation or Modification	No. of Students			% Scoring > 349		
			Grade 10	Grade 11	Grade 12	Grade 10	Grade 11	Grade 12
Accommodations								
B	TS	Transfer of Responses to Answer Document	148	92	118	54.7%	21.7%	16.1%
C	OR	Oral Responses Dictated to a Scribe	82	117	114	37.8%	14.5%	20.2%
D	SO	Spell Checker Or Grammar Checker Off	173	191	204	70.5%	27.2%	28.4%
E	EO	Essay Reponses	71	110	126	50.7%	19.1%	23.0%
F	AN	Assistive Device	60	72	57	41.7%	37.5%	31.6%
G	BV	Braille Version	15	18	12	80.0%	11.1%	16.7%
H	LV	Large Print Version	114	62	72	61.4%	24.2%	18.1%
J	TD	Test Over More Than One Day	246	308	337	26.8%	17.5%	19.3%
K	SB	Supervised Breaks	2,014	2,362	2,051	30.2%	16.6%	16.6%
L	BT	Beneficial Time	277	372	404	24.9%	14.0%	13.6%
M	HH	Tested At Home Or Hospital	54	31	31	33.3%	38.7%	29.1%
Modifications								
N (ELA)	DI	Dictionary	524	1,138	1,306	27.1%	18.1%	19.0%
O	SL	Sign Language	28	39	54	3.6%	12.8%	11.1%
P	OP	Oral Presentation	1,554	3,208	3,896	24.3%	17.8%	20.3%
T	SC	Spell Checker Or Grammar Checker	179	369	623	44.1%	22.5%	18.3%
U	ER	Essay Reponses	46	86	124	32.6%	22.1%	30.7%
V	AD	Assistive Device	9	16	21	22.2%	25.0%	33.3%
W	UM	Unlisted Modification	118	312	327	19.5%	11.2%	15.3%

One point of note is that the number of students who took the mathematics exam with modifications, in nearly all cases using a calculator, was much higher for 11th and 12th grade students. It did not appear to help them much, which is not surprising, as the CAHSEE does not test computational skills to any great extent.

Table 3.22. Frequency of Accommodations and Modifications and Percent Scoring 350 or More: Math

Answer Sheet Code	Data Base Code	Description of Accommodation or Modification	No. of Students			% Scoring > 349		
			Grade 10	Grade 11	Grade 12	Grade 10	Grade 11	Grade 12
Accommodations								
B	TS	Transfer of Responses to Answer Document.	132	80	82	42.4%	12.5%	23.2%
C	OR	Oral Responses Dictated to a Scribe	62	85	60	40.3%	23.5%	25.0%
G	BV	Braille Version	10	27	25	70.0%	22.2%	20.0%
H	LV	Large Print Version	94	66	70	45.7%	24.2%	18.6%
J	TD	Test Over More Than One Day	86	167	176	18.6%	16.8%	21.9%
K	SB	Supervised Breaks	1,653	2,046	1,810	28.0%	16.6%	15.8%
L	BT	Beneficial Time	217	287	311	26.7%	13.2%	11.6%
M	HH	Tested At Home Or Hospital	41	29	34	24.4%	17.2%	32.4%
N (Math)	DM	Dictionary	48	106	202	15.6%	13.2%	19.8%
	SL	Sign Language						
O			43	68	107	25.6%	8.8%	11.2%
P	OP	Oral Presentation						
			1,287	2,446	2,718	21.2%	15.0%	18.5%
Modifications								
Q	CA	Calculator	4,389	9,582	9,882	25.8%	17.5%	17.5%
R	AT	Arithmetic Table	157	325	483	18.5%	21.2%	16.6%
S	MM	Math Manipulatives	25	85	71	56.0%	28.2%	19.7%
V	AD	Assistive Device	2	14	7	50.0%	7.1%	14.3%
W	UM	Unlisted Modification	99	276	287	15.2%	12.3%	12.5%

Table 3.23 shows the number of 10th grade students receiving testing accommodations and modifications and their CAHSEE passing rates by level of participation in regular instruction. Passing rates are relatively similar for students who did and did not receive an accommodation.

Tables 3.25 and 3.26 show number of 10th grade students receiving testing accommodations and modifications by the type of special education service received and also shows passing rates for each testing condition. Both 2005 and 2006 results for students with CASEMIS data are included to increase the sample size and stability of comparisons. Results for the two years were quite similar in both the number of students accommodated and their CAHSEE passing rates.

In summary, a significant number of students with disabilities did receive testing accommodations and many took the test with modifications. Students testing with accommodations or modifications may be different from students who did not receive accommodations or modifications in many significant ways. It is thus not possible to draw any firm conclusions from differences in passing rates for these groups. In addition, available data from either CASEMIS or CAHSEE do not provide information on

other accommodations that students might be receiving in instruction but were not able to use on the CAHSEE. Additional information is needed to determine whether more students could demonstrate mastery of the CAHSEE standards with additional accommodations or with a different type of assessment altogether.

Table 3.23. Number of Matched 10th Grade Special Education Students and Percent Meeting the CAHSEE Requirement by Class Participation and Testing Condition

Percent of Time Away from Regular Class	Number of Students by Testing Condition			Percent Scoring 350 or More by Testing Condition		
	No. Accom.	Accom.	Modif.	No Accom.	Accom.	Modif.
ELA						
< 20%	13,605	655	453	50.5%	55.6%	40.8%
20%–50%	10,609	631	555	31.6%	29.6%	30.5%
51–89%	8,461	527	775	11.3%	11.8%	11.9%
> 90%	1,679	225	68	31.6%	25.3%	30.9%
All	34,354	2,038	1,851	34.1%	32.9%	25.2%
Mathematics						
< 20%	12,874	576	1234	48.8%	45.7%	42.1%
20%–50%	10,012	584	1205	29.2%	27.5%	27.8%
51–89%	7,885	538	1277	10.3%	11.0%	10.0%
> 90%	1,580	164	215	26.5%	17.7%	22.8%
All	32,351	1,842	3,931	32.3%	27.5%	26.2%

Table 3.24. Number of Matched 10th Grade Special Education Students and Percent Meeting the CAHSEE ELA Requirement by Type of Service and Testing Condition

Type of Service	Test Year	Number of Students			Percent Scoring 350 or More on the ELA Test		
		No Accom.	Accom.	Modif.	No Accom.	Accom.	Modif.
Regular Class with Accommodation	2005	638	151	14	39.7%	33.1%	--
	2006	1,143	42	76	45.2%	47.6%	46.1%
Non-intensive program (learning center)	2005	1,405	353	8	45.5%	42.8%	--
	2006	1,278	65	46	47.2%	50.8%	39.1%
Resource Specialist (Non-intensive)	2005	17,292	3,786	261	40.2%	38.6%	38.7%
	2006	20,318	1,013	783	38.5%	43.8%	38.3%
Special Day Inclusion Services	2005	123	52	6	16.3%	28.9%	--
	2006	224	13	20	26.8%	38.5%	15.0%
Special Day in Public Integrated Facility	2005	8,307	3,119	332	10.9%	11.9%	12.7%
	2006	9,861	727	939	11.9%	14.9%	13.3%
Special Day in Public Separate Facility	2005	165	33	5	33.3%	27.3%	--
	2006	199	33	7	30.2%	36.4%	--
Language and Speech	2005	3,218	950	94	29.1%	19.1%	14.9%
	2006	4,030	282	293	30.3%	29.1%	17.8%
Vocational Education Training	2005	1,802	571	58	28.5%	17.5%	12.1%
	2006	3,038	161	109	25.4%	27.3%	16.5%
Individual and Small Group Instruction	2005	653	143	30	35.1%	30.1%	36.7%
	2006	921	43	39	33.7%	39.5%	18.0%
Vision Services	2005	71	70	15	62.0%	51.4%	40.0%
	2006	108	92	14	56.5%	64.1%	42.9%
Psychological Services	2005	680	150	16	34.4%	34.0%	18.8%
	2006	811	59	48	40.4%	39.0%	41.7%
Transportation Services	2005	1,003	371	54	28.5%	24.8%	29.6%
	2006	1,284	151	99	28.8%	37.1%	20.2%
Other Services	2005	6,427	1,575	180	30.1%	27.0%	29.4%
	2006	8,769	526	431	31.0%	39.2%	26.7%
All Students Receiving Special Education Services	2005	29,205	7,706	693	32.7%	28.0%	24.7%
	2006	34,354	2,038	1,851	34.1%	32.9%	25.2%

Note. Students may have received more than one type of service. Passing rates are excluded for groups with fewer than 10 students. Students taking the test with a modification are not counted as passing, but may apply for a waiver if they score 350 or more.

Table 3.25. Number of Matched 10th Grade Special Education Students and Percent Meeting the CAHSEE Math Requirement by Type of Service and Testing Condition

Type of Service	Test Year	Number of Students			Percent Passing Scoring 350 or More on the Math Test		
		No Accom.	Accom.	Modif.	No Accom.	Accom.	Modif.
Regular Class with Accommodation	2005	626	122	51	40.9%	23.8%	52.9%
	2006	1059	52	139	42.8%	48.1%	39.6%
Non-intensive program (learning center)	2005	1,301	248	205	39.8%	37.9%	37.6%
	2006	1184	68	139	46.2%	48.5%	34.5%
Resource Specialist (Non-intensive)	2005	16,608	2,744	2,010	37.8%	34.7%	35.4%
	2006	19278	871	1936	40.0%	38.0%	38.6%
Special Day Inclusion Services	2005	110	14	50	21.8%	21.4%	26.0%
	2006	185	9	52	18.9%	--	17.3%
Special Day in Public Integrated Facility	2005	7,597	2,088	1,989	9.4%	10.4%	8.7%
	2006	9165	704	1594	10.2%	12.4%	10.9%
Special Day in Public Separate Facility	2005	144	28	24	23.6%	14.3%	8.3%
	2006	176	28	32	23.9%	32.1%	15.6%
Language and Speech	2005	3,008	659	580	32.4%	22.3%	13.8%
	2006	3798	256	537	32.9%	24.6%	18.6%
Vocational Education Training	2005	1,699	455	293	27.1%	15.8%	16.7%
	2006	2907	178	226	22.6%	24.2%	20.4%
Individual and Small Group Instruction	2005	615	90	108	30.1%	23.3%	21.3%
	2006	866	33	94	32.1%	30.3%	22.3%
Vision Services	2005	78	63	16	52.6%	52.4%	25.0%
	2006	114	78	24	61.4%	47.4%	33.3%
Psychological Services	2005	688	106	76	29.3%	25.5%	25.6%
	2006	760	51	109	35.9%	27.5%	43.1%
Transportation Services	2005	951	242	214	22.9%	24.4%	17.8%
	2006	1218	150	160	25.5%	28.7%	12.5%
Other Services	2005	6,194	1,156	796	26.9%	22.4%	20.1%
	2006	8335	493	854	27.8%	28.6%	24.2%
All Students Receiving Special Education Services	2005	27,642	5,384	4,483	30.7%	25.3%	22.7%
	2006	32351	1842	3931	32.3%	27.5%	26.2%

Note. Students may have received more than one type of service. Passing rates were not computed for cells with fewer than 15 students. Passing rates are excluded for groups with fewer than 10 students. Students taking the test with a modification are not counted as passing, but may apply for a waiver if they score 350 or more.

Summary of Findings

In our 2006 analyses, we took a closer look at two populations of students who have had particular difficulty meeting the CAHSEE requirement—English learners and students with disabilities. We examined additional information on the characteristics of students in each of these populations and on the nature of the services they receive.

For English learners, the most striking result was how many had been enrolled in U.S. schools for a long time, essentially since kindergarten. Students in this group appeared to have more severe problems, many participating in special education programs as well as English language development programs. Another important finding was that students who were enrolled within the last few years had lower CAHSEE passing rates compared to students who had been in English language development programs for a longer time. Students who had been English learners but were subsequently reclassified as fluent had relatively little difficulty with the CAHSEE.

As was the case in 2005, our analysis of information on students with disabilities revealed a strong relationship between the types of special education services a student receives and success on the CAHSEE. More than a third of the students analyzed receive non-intensive services such as in-class accommodations or a resource specialist and are able to spend more than 80 percent of their time in regular instruction. About half of these students pass the CAHSEE while still in 10th grade. Students receiving these services who had not passed in the 10th grade showed significant gains when they retested in the 11th grade. It seems likely that with continued assistance these students will have a good chance of meeting the CAHSEE requirement. It is thus reasonable to ask that both the schools and these students themselves continue to work to meet the required standards.

About one-quarter of the students receiving special education services require more intensive assistance. These students participate in regular instruction less than 20 percent of the time and only about 10 percent of them pass the CAHSEE during the 10th grade. Those who retest in the 11th grade show only small gains in CAHSEE scores compared to other students. The services received by these students are specified by individualized educational plan (IEP) teams, who have statutory authority for making such judgments. There is no basis for second-guessing the services being provided to these students, although it is important to ask IEP teams to be sure student classifications are appropriate. It is less reasonable to hold these students responsible for mastering the skills assessed by the CAHSEE when they are not receiving instruction related to the skills tested by the CAHSEE. Alternate goals and some way of recognizing achievement of these alternate goals are needed for students in this second group.

Another quarter of the students we analyzed receive other combinations of services and show mixed results on the CAHSEE. More detailed information on the needs of these services and the specific services provided is needed to determine which students have a reasonable chance of meeting the CAHSEE requirements.

Chapter 4: Principal and Teacher Survey Responses

Introduction

Principals and teachers within a sample of schools completed surveys in spring 2006 to report current experiences, impressions, and expectations regarding the CAHSEE exam. To the maximum extent possible, survey items were retained intact from previous years to facilitate comparisons over time. Although this was the seventh year of the independent evaluation of CAHSEE, the 2005 instruction survey differed substantially from the longitudinal survey discussed here. In order to encourage participation in the 2005 Instruction Study, no longitudinal surveys were administered in 2005. Therefore the most recent comparison year for the 2006 principal and teacher survey questions was 2004.

In order to identify trends over time, HumRRO established a longitudinal sampling base. We began in 2000 with a representative sample of 84 high schools from 24 districts to be surveyed each spring. We collected Year 1 data from this sample in Spring 2000, Year 2 data in Spring 2001, Year 3 data in Spring 2002, Year 4 data in Spring 2003, Year 5 data in Spring 2004, and Year 7 data in Spring 2006. The number of participating districts and schools varied slightly from year to year as some dropped out or were replaced.

Two surveys were administered to capture Year 7 data: one for principals, and one for teachers in the same schools. The survey of principals requested information about issues such as preparation and planning for, and impact of the CAHSEE (see Appendix A). The teacher survey emphasized classroom practices, issues regarding the planning and preparation for administration of the CAHSEE, and its impact on teachers, students, and parents (see Appendix B). Both surveys contained one concluding open-ended question to allow respondents to clarify their responses and to inform HumRRO of any additional information they felt was worth sharing. Throughout this chapter references to the principal (PR) and teacher (T) surveys will be denoted with the survey number (e.g., PR-1, T-9).

Survey Development

The following are the main themes addressed in these surveys:

1. What is the extent and type of current preparation for the CAHSEE?
2. What degree of awareness of the CAHSEE do students and parents currently have?
3. What activities have schools undertaken to prepare students for the CAHSEE?
4. How do principals and teachers address the issue of students who are unsuccessful on the CAHSEE?
5. What are the principals' and teachers' judgments of the impact of the CAHSEE?

6. How do principals and teachers respectively assess the influence of the CAHSEE on instructional practices?
7. What are the principals' and teachers' judgments regarding the extent to which students have received instruction in the content standards relevant to the CAHSEE?

To the extent possible, survey items on the Spring 2006 surveys were identical to those on the spring 2000, 2001, 2002, 2003, and 2004 surveys. This consistency served to maximize comparability across years, so that trends could be inferred. However, some items were improved in response to earlier feedback. Continued reaction to the survey items may result in further item phrasing improvements in the future. Where questions have been revised substantially, the changes are noted.

Sampling and Administration

The goal for the sampling plan was to select districts for inclusion in the CAHSEE evaluation data collection efforts that would be as representative of California schools as possible. A complete description of the sampling procedure is presented in Wise et al. (2000a). In short, a representative sample of 24 districts was selected in Spring 2000 for intensive study over the course of the CAHSEE evaluation. Replacements were identified for each district in the event the targeted district could not participate. In each original and replacement district, we selected 1–15 high schools, depending on district size, to create a representative sample of 84 schools. Where possible, we identified replacements for each selected school. In small districts containing only one or two high schools, all schools were in the original sample. Sampling ratios were established so that each school would represent approximately the same number of 10th grade students. In this way simple averages across the schools in the sample would provide estimates for all 10th grade students in the state.

In 2006 the respondent sample for the surveys comprised 26 districts. Initial contact was made with contact persons (POCs) in each district in November 2005 to inform them that it was time for the longitudinal survey, to request updated principal contact information, and to ensure that it was acceptable to contact the schools in the sample from that district. Once approval from the district had been verified, we sent the district POC a launch letter from CDE, a cover letter for the longitudinal study, and samples of school surveys. We made initial contact with the schools' principals in March 2006 through a faxed or mailed information packet. We offered to provide the surveys in either print or electronic formats, and asked principals to indicate their preference for survey format when they confirmed their schools' participation. As an inducement to use the electronic format, a series of drawings for Apple iPod Shuffle™ music players were established in which individuals who completed the electronic survey were automatically entered. If the principal elected the electronic format, she or he was asked to provide e-mail addresses for two 9th or 10th grade English-language arts teachers and two Algebra 1 (or other appropriate mathematics course) math teachers.

The Web-based (Internet) survey was based on the paper version of the survey. In February 2006 we e-mailed instructions, a unique password, and the Web address (i.e., Uniform Resource Locator, or URL) of the survey to those respondents who preferred the Internet version. The online survey went live on March 20, 2006 and remained online until June 2. For the few schools requesting paper surveys, survey packets were shipped in April or May 2006 to the attention of the principal or designee. The packets included the following:

- Cover letter and instructions to principal
- One principal survey
- Cover letter and instructions to teachers
- Four teacher surveys—two labeled for English-language arts (ELA) and two labeled for mathematics
- Instructions and packaging for returning evaluation materials

The packet included a request for principals to complete their questionnaires or to designate someone to do so. We asked them to identify one or two teachers of Algebra 1, or other appropriate mathematics course, and one or two 9th or 10th grade ELA teachers to complete the teacher surveys (if faculty size was sufficient). The cover letters to each group encouraged respondents to contact a HumRRO project member if they had questions or concerns.

We originally requested that surveys be completed by April 26, and extended that deadline until late May to obtain the maximum response rate. In order to encourage early participation, we held three drawings during the survey window. On April 3, April 17, and May 1, we randomly selected one respondent from among the principals and teachers who had completed the Internet survey by that date, to win an iPod Shuffle™. We sent a reminder to all nonrespondents a week prior to each drawing to remind them of the upcoming opportunity. In addition we conducted a regular schedule of follow-up faxes and telephone calls to schools that had not initially responded and to schools that had not returned their evaluation materials.

Principal and Teacher Findings

Fifty-one high school principals and 202 teachers completed surveys in 2006. The number of completed surveys increased from 2004 in which 34 high school principals and 135 teachers responded. Response rates are reported in Table 4.1. Results are reported in the following areas:

- Overview
- Background
- Effect of the CAHSEE
- Use of the CAHSEE Results
- State Academic Content Standards
- Expectations
- Awareness
- Other

We have reported the results in two summaries of: (a) principal and (b) teacher responses to the Spring 2006 survey. In addition, as appropriate, we compared the 2006 responses with comparable questions on the spring 2000, 2001, 2002, 2003, and 2004 surveys to provide information regarding trends and stability of responses over time. Note that these comparisons are presented at a summary level; that is, changes in responses from individual schools are not presented. In fact, school/respondent identity was not attached to survey responses in order to ensure confidentiality of responses. Because of this, individual schools' trends cannot be determined.

Table 4.1. Longitudinal Survey Response Rates

Target Respondents	Target Sample Size	Identified Sample	Number of Responses	Response Rate (Based on Target Sample Size)	Response Rate (Based on Identified Sample)
Principals	99	87	51	52%	59%
Teachers	396	338	202	51%	60%

Note. "Identified sample" represents individuals who were specifically identified during the multi-step recruiting process (e.g., districts identified school principals, who in turn identified teachers).

Overview

Principals and teachers reported their impressions of, experience with, and recommendations for the CAHSEE assessment in 2006. Overall, their responses indicate that much has been done regarding the CAHSEE in the schools: (a) faculty/staff, students, and students' parents know more about the CAHSEE today than when first surveyed in 2000, (b) numerous activities related to improving student achievement on the CAHSEE have been implemented, (c) there has been an increase in remedial practices for students who do not pass the CAHSEE or do not seem prepared to take it, (d) the alignment between state academic content standards and school curricula is increasing, (e) the CAHSEE Teacher Guide is increasingly useful (f) the CAHSEE is believed to have a positive influence on instructional practices, (g) student motivation and parental involvement regarding the CAHSEE has increased, (h) more teachers know the difference between "teaching to the test" and "aligning the curriculum and instruction to the standards," (i) there are more students receiving instruction in ELA and mathematics standards, and (j) there is a more positive view of the effect of the CAHSEE on student retention and dropout rates. Survey results also show that both principals and teachers see the need for further improvements. There are, of course, still more improvements to be made. School populations differ, as well as the challenges school personnel face and the results of their efforts.

On the other hand, the surveys show some aspects of the CAHSEE have remained consistent or decreased over the years. Teachers and principals report fewer actions to promote student learning have been fully implemented than in earlier years. They report that the CAHSEE still draws financial and other resources away from other courses, although to a lesser extent than in the past. The aspects that remain similar over the years are (a) teachers' plans for student classroom activities, (b) quality of

CAHSEE-related professional development received from the state (the improvement of locally originated professional development), (c) the continued importance of language barriers in hindering student success in meeting the requirements of the CAHSEE, and (d) plans/strategies to facilitate students with disabilities and English learners to succeed on the CAHSEE. The CAHSEE has evolved into a more mature program over the years, and survey respondents indicate plans to continue to improve actions to promote student learning in the future.

Background

This section gives a general impression of the schools surveyed in 2006 with some comparisons to previous survey years. Principals and teachers provided demographic information about themselves and their schools (e.g., experience, education, number of teachers on staff). Principals reported on specialty education programs that facilitate student success in their schools, as well as on the CAHSEE, and graduation rates by subgroup population. Teachers reported which grades they teach and specific information about their classes (e.g., percentage of fluent English speakers). Teachers also estimated how much time students spent completing homework outside the classroom and what activities students complete during class time. These questions were not specifically CAHSEE-related but contribute to the understanding of the respondent pool and the general environment at the schools surveyed.

Principals

Principals indicated that they have held principal or other school-level administration positions for 1–32 years, with a mean of 9 years. They reported 3–31 years of teaching experience (mean of 14 years), 1–33 years in their present schools (mean of 9 years), and 5–40 years of working in public schools (mean of 23 years) (PR-1).

Principals were asked to provide background information on their schools (PR-2). The current number of teachers on staff ranged from 5 to 250, with a mean of 94 (SD=49) and median of 91. When asked the percentage of teachers who have taught at this school for 3 or more years, principal responses ranged from 40 to 94 percent, with a median of 75 percent. Principals reported that the percentage of teachers with advanced degrees ranged from 1 percent to 95 percent (median=48%). Principals also reported that 60–100 percent of their teachers were certified in the subject they are teaching (median=97%). The survey asked principals to indicate any major faculty or staff changes their school has experienced over the past 3 years (PR-3). Forty-six percent reported an increased number of teachers, while 16 percent said the number of teachers had decreased (one person indicated the number of teachers had both increased and decreased over this time span). Twenty-six percent of principals indicated the number of principals or other administrators had increased, while 20 percent said the number of principals or other administrators had decreased over the past 3 years. Thirty-four percent indicated there had been no major faculty or staff changes.

The survey asked principals to indicate whether their schools offered various specialty education programs (PR-4). Special education and programs for English learners (EL) were offered by 92 percent of schools; remedial courses and Advanced Placement (AP) were offered by 83 percent of schools; 60 percent, targeted tutoring; 45 percent, school/community/business partnerships; 38 percent, International Baccalaureate; 36 percent, magnet programs; 34 percent, multicultural/diversity-based programs; and 11 percent, other. Besides the programs listed by the survey, four principals (8%) provided other responses such as “Intensive,” “Continuation,” CAHSEE support, and the Advancement via Individual Determination (AVID) curriculum that their schools offer to students. Five principals (10%) provided general comments on this question. In one school, the principal reported an improved ELA intervention for students that are at or below grade level. Another principal stated that the school started a targeted tutoring program for at-risk students. Another school offers CAHSEE Preparation only as a remedial class. Two other comments were reported; one said, “this is an independent study school,” and the other that the school is small and on a college campus so all of the students are concurrently registered in college and high school to fulfill graduation requirements.

The estimated percentage of students who participated in each specialty education program offered by schools increased from data collected in 2004. Student participation in all other programs showed an estimated increase between 3 and 35 percent (school/community/business partnerships and International Baccalaureate, respectively). Additionally, principals were asked to estimate the percentage of students who participate in each specialty education program. Table 4.2 summarizes the principals’ estimates for programs offered by their schools.

Table 4.2. Principals’ Responses to Estimated Percentage of Students Participating in Specialty Education Programs (N=51)

Reasons	N	Percentage of Students Participating in Specialty Education Programs					
		0%	1–20%	21–40%	41–60%	61–80%	81–100%
Remedial courses	39	11	64	8	3	11	3
Magnet Program	17	44	44	6	0	0	6
Special Education	43	0	88	8	3	0	3
Program for English Learners	43	2	69	21	2	2	2
Multicultural/Diversity-Based	16	56	6	0	0	19	19
Advanced Placement	39	3	68	24	3	0	3
International Baccalaureate	18	67	22	11	0	0	0
School/Community/Business Partnerships	21	19	71	5	5	0	0
Targeted Tutoring	28	11	70	11	4	4	0
Other	5	60	0	0	0	20	20

Note. Row totals may not equal 100 percent due to rounding.

Principals reported, on average, a graduation rate of 83 percent for seniors overall (SD=22), with reported rates varying by race/ethnicity group (PR-5). Specifically, principals responded as to the percentage of 9th graders who graduate within 4-5 years. Principals indicated an average graduation rate of 77 percent (SD=29) for Caucasian, not Hispanic; 67 percent (SD=30) for Hispanic/Latino; 63 percent (SD=43) for Asian or Pacific Islander; 61 percent (SD=39) for Black or African American, not Hispanic; 51 percent (SD=47) for American Indian/Alaskan Natives; and 19 percent (SD=37) for other. Principals were asked to summarize post-graduation plans of their seniors (PR-6). Twelve percent of respondents indicated that they do not collect such data. Table 4.3 summarizes the responses of the principals with access to such information.

Table 4.3. Percentage of Principals Reporting Post-Graduation Plans for Seniors in Their Schools (N=51)

Post-Graduation Plans	Percentage of Seniors										
	0%	1–10%	11–20%	21–30%	31–40%	41–50%	51–60%	61–70%	71–80%	81–90%	91–100%
Working full time	0	49	16	16	8	3	3	0	0	5	0
Attending a vocational, technical, or business school	3	64	25	3	3	0	0	0	3	0	0
Attending a 2-year college	0	5	8	26	28	13	15	3	3	0	0
Attending a 4-year college, service academy, university	3	10	23	21	13	15	10	3	0	3	0
Serving in the regular military service	3	90	5	3	0	0	0	0	0	0	0
Other	8	75	8	0	0	0	0	0	0	0	8

Note. Row totals may not equal 100 percent due to rounding.

Teachers

Teachers were asked to provide demographic information. Thirteen percent reported having only a bachelor's degree; most respondents reported education beyond a bachelor's degree (34%, some graduate school; 50%, master's degrees; 2%, doctoral degrees; and 1%, other) (T-1). One teacher indicated that her highest level of education was a teaching credential. Forty-eight percent of teachers indicated that the primary subject area they taught was English-language arts and 53 percent specified mathematics as their primary subject area (T-2). Eighty-three percent indicated that they are certified in their primary subject area (T-3). This percentage has dropped from data collected in 2004, in which 93 percent of teachers indicated they were certified in their primary subject area. Nine teachers (4%) stated that they are certified in various subjects, such as: Resource Specialist, Physical Education, Industrial Technology, Social Studies, and Multi-Subjects. Mathematics teachers answering this survey had slightly more experience than their ELA counterparts (T-4). ELA teachers reported a mean of 11.9

years of teaching experience, a mean of 11.4 years as teachers in their primary subject area, and a mean of 6.9 years teaching at present school. Math teachers indicated a mean of 13.3 years of teaching experience, a mean of 11.6 years as teachers in their primary subject area, and a mean of 8.1 years teaching at present school. Overall teaching experience has also fallen slightly from 2004 respondents when both ELA and math teachers reported a mean of 15.3 years of teaching experience.

Teachers were asked to provide some information about their own classes. The average reported 2006 class size was 27 students (SD=7) (T-6). Table 4.4 compares 2004 and 2006 teacher estimates of their students' English fluency (T-7). The number of fluent-English-speaking students taught by responding teachers remained fairly constant compared to 2004. That is, 62 percent of teachers in 2004 and 64 percent of teachers in 2006 reported more than 90 percent of students were fluent in English.

Table 4.4. Percentage of Teachers Estimating Their Students' English Fluency (N=202)

Teacher Rating	2004	2006
100%	13	13
90%–99%	49	51
75%–89%	22	23
50%–74%	11	8
Less than 50%	5	4

Note. Column totals may not equal 100 percent due to rounding.

Within the survey sample, ELA teachers appeared to be more specialized in grade-level teaching than were math teachers. Table 4.5 indicates the grade levels taught by these teachers (T-5).

Table 4.5. Percentage of Surveyed Teachers That Teach at Each Grade Level (N=202)

Grade Level Taught	ELA	Math
Grade 9	67	95
Grade 10	60	98
Grade 11	35	92
Grade 12	38	84

Note. Respondents could select multiple responses, thus the columns total more than 100 percent.

The survey asked teachers to estimate the amount of time, on average, they believed students spend working on assignments in the subject they teach (as opposed to total homework time) outside the classroom each week (T-8). One percent estimated none; 35 percent, less than 1 hour; 50 percent, 1 to 3 hours; and 15 percent estimated more than 3 hours.

Teachers were asked to estimate how often they plan for students to participate in specific types of activities (T-9). Table 4.6 indicates the activities rated most frequently (once or twice a week or almost every day). The 2006 ratings were very similar to ratings in 2004, with only a slight difference in activity order.

Table 4.6. Percentage of Teachers Estimating Time Their Students Spend Each Week on Assignments Outside the Classroom for Their Class (N=202)

Assignment	2004	2006
Do work from supplemental materials	80	86
Do work from textbooks	87	84
Apply subject area knowledge to real-world situations	73	67
Work in pairs or small groups	64	67
Take quizzes or tests	61	67
Write a few sentences	65	66

Note. Respondents could select multiple responses, thus the columns total more than 100 percent.

Effect of the CAHSEE

The CAHSEE requirement has had a ripple effect throughout the California school system. Preparing to meet the requirements affects how faculty/staff time is allocated as CAHSEE-related activities are prescribed and implemented to facilitate student success. New information sources have been provided (the CDE Web site and the CAHSEE Teacher Guide) for teachers to acquire, comprehend, and apply. Principals have redirected their time and effort to participate in activities related to the CAHSEE. And, of course, activities were planned and implemented to prepare students for the CAHSEE, in addition to or in place of existing activities. For the most part, the resources the school provides students and what teachers plan for the classroom have been modified to accommodate the CAHSEE. Both principals and teachers indicated that they deemed most modifications good and useful and that preparation for the CAHSEE has improved instructional practices.

Respondents were asked how much time they personally spent during the 2005–2006 school year in activities related to the CAHSEE (e.g., meetings, discussions, curriculum review, professional development) (PR-16). A majority of principals reported spending more than 35 hours (59%). Less than one-third reported spending between 16 and 35 hours (30%). Nine percent reported spending between 6 and 15 hours and 2 percent reported spending less than 6 hours. No principals reported spending none of their time in CAHSEE-related activities. Principals indicated they spent more time in activities related to the CAHSEE than in 2004 when only 15 percent of principals reported spending more than 35 hours.

Table 4.7 indicates teachers' estimates of the number of hours spent on classroom instruction and the number of hours spent on other activities related to the CAHSEE (T-17a, 17b, 17c). In 2006 teachers reported more time spent on activities related to the CAHSEE (e.g., faculty and department meetings, discussions, staff

development), relative to the 2004 responses (as noted in bold in Table 4.7). Additionally, in 2006 teachers reported spending slightly more time than in 2004 on both classroom instruction/activities they would not have engaged in if it weren't for the CAHSEE (e.g., unit or course review) and preparation for such instruction/activities (e.g., department planning, lesson plan review).

By way of comparison, Table 4.8 reports the amount of time in the current school year teachers reported spending in professional development workshops, in-service, or seminars in their primary subject area (T-10). They were instructed to include attendance at district-sponsored training and external training. Results are reported separately for ELA and math teachers. Comparison of Tables 4.7 and 4.8 reveals that teachers spend substantially more time in subject-area training than in the individual categories of CAHSEE activities.

Teachers were asked to rate the quality of CAHSEE-related professional development they have received this year from local and state sources (T-18). Table 4.9 indicates that, overall, ratings of local professional development activities were higher than ratings of state professional development activities. (Note that the 2001–2002 survey did not have “None” as a response option.) In 2006, 25 percent of teachers indicated that they did not receive professional development from local sources and 38 percent indicated that they did not receive professional development from state sources. Among those who did receive such an opportunity, professional development from local sources was rated more highly than that provided by state sources (46% versus 31% ratings of “excellent” or “good”), with ratings of locally provided professional development receiving more “excellent” ratings in 2006 than in 2004 (12% versus 9%). Ratings for state sources remained very consistent between 2006 and 2004.

Table 4.7. Percentage of Teachers Estimating Various Amounts of Time on CAHSEE Activities

Activity	Academic Year	None	Fewer than 6 Hours	6–15 Hours	16–35 Hours	More than 35 Hours
Time spent on classroom instruction preparation activities related to CAHSEE (e.g., department planning, lesson plan review)	2001–2002	N/A	N/A	N/A	N/A	N/A
	2002–2003	N/A	N/A	N/A	N/A	N/A
	2003–2004	4	25	28	24	19
	2005–2006	5	24	29	21	21
Total classroom instruction time spent on activities they would not have engaged in if it weren't for the CAHSEE (e.g., unit or course review)	2001–2002	29	36	26	7	3
	2002–2003	24	41	14	14	7
	2003–2004	28	37	22	10	3
	2005–2006	24	37	25	8	6
Time spent on activities related to the CAHSEE (e.g., faculty and department meetings, discussions, staff development)	2001–2002	3	42	33	14	9
	2002–2003	3	34	30	19	14
	2003–2004	3	40	37	11	9
	2005–2006	6	37	29	18	10

Note 1. Discernable changes in time from the 2003–2004 school year are noted in bold.

Note 2. Row totals may not equal 100 percent due to rounding.

Table 4.8. Percentage of Teachers Estimating Various Amounts of Time in Professional Development, In-Service, or Seminars in Primary Subject Area (N=202)

Respondent Group	None	Fewer than 6 Hours	6–15 Hours	16–35 Hours	More than 35 Hours
ELA Teachers	2	12	30	25	32
Math Teachers	5	21	26	18	31

Note. Column totals may not equal 100 percent due to rounding.

Table 4.9. Percentage of Teachers Rating Quality of Professional Development Experiences

Quality of Professional Development You Have Received	From Local Sources				From State Sources			
	2001–2002	2002–2003	2003–2004	2005–2006	2001–2002	2002–2003	2003–2004	2005–2006
Excellent	6	14	9	12	2	2	4	4
Good	35	26	35	34	15	26	27	27
Fair	35	20	21	22	36	12	19	20
Poor	16	12	12	8	38	16	10	10
None	N/A	26	22	25	N/A	44	38	38
No response	9	2	1	1	9	4	2	3

Note 1. 2001–2002 survey did not offer “None” as a response option.

Note 2. Column totals may not equal 100 percent due to rounding.

Teachers were also asked to rate the extent to which their instruction has benefited from professional development over the past four years (T-11). Table 4.10 reveals that ELA teachers responded slightly more positively than math teachers. Approximately a third of teachers indicated their instruction has benefited to a great extent; another third responded to a moderate extent. These percentages are markedly higher than in 2004, when only 14 percent of ELA teachers and 11 percent of math teachers reported their instruction has benefited from professional development “to a great extent.”

Table 4.10. ELA and Math Teacher Ratings of Instructional Benefit Garnered from Professional Development Over Four Years (in percentages)

Rating	ELA Teachers		Math Teachers	
	2004	2006	2004	2006
To a great extent	15	37	11	31
To a moderate extent	34	37	21	36
To a slight extent	25	23	44	31
Not at all	27	3	24	2

Note. Column totals may not equal 100 percent due to rounding.

Survey questions investigated the teachers' responses to the usefulness of two information sources: the CDE Web site and the CAHSEE Teacher Guide (T-12, T-13). Table 4.11 indicates that ratings were generally positive, although a substantial percentage of teachers was unfamiliar with the resources in question. A greater percentage of ELA and math teachers indicated the CAHSEE Teacher Guide was "very useful" than in 2004 (when it was known as the Remediation Guide), and fewer teachers reported being unfamiliar with the Teacher Guide in 2006 than in 2004.

Table 4.11. ELA and Math Teacher Ratings of Usefulness of CAHSEE Resources (in percentages) (Teacher N=202)

Rating	CDE Web site		CAHSEE Teacher Guide	
	ELA Teacher	Math Teacher	ELA Teacher	Math Teacher
Very Useful	17	19	33	26
Somewhat Useful	28	33	35	37
Slightly Useful	11	15	15	16
Not At All Useful	3	3	1	1
I am not familiar with this resource	41	31	17	20

Note. Column totals may not equal 100 percent due to rounding.

Principals were asked to indicate the types of activities their school undertook to prepare faculty/staff for the Spring 2006 administration of the CAHSEE (PR-12). Table 4.12 indicates that more principals participated in and provided these activities in 2006 than in previous years, with a difference of seven to 15 percent. Principals reporting undertaking no special preparation in 2006 decreased to the 2003 level. Seventeen percent (9 out of 51) of the principals listed an array of training sessions that are provided for their faculty and staff members. The schools have offered faculty and staff members training in conducting Saturday academies, literacy and reading sessions, mathematic reviews, CAHSEE pullout sessions, and parent informational nights.

Respondents were asked to identify the specific activities they had undertaken to prepare students for the Spring 2006 administration of the CAHSEE (PR-15, T-19). All principals reported initiating some activities to prepare students for the Spring 2006 CAHSEE. Figure 4.1a presents the percentage of principals who reported implementing each activity, in descending order of endorsement, in 2006; Figure 4.1b presents teachers' responses. One principal added an activity beside those listed on the survey, namely that the school works to "track individual students." Three percent of the teachers responded to this open-ended question, and indicated that they use CAHSEE preparation materials and teach a CAHSEE preparation class.

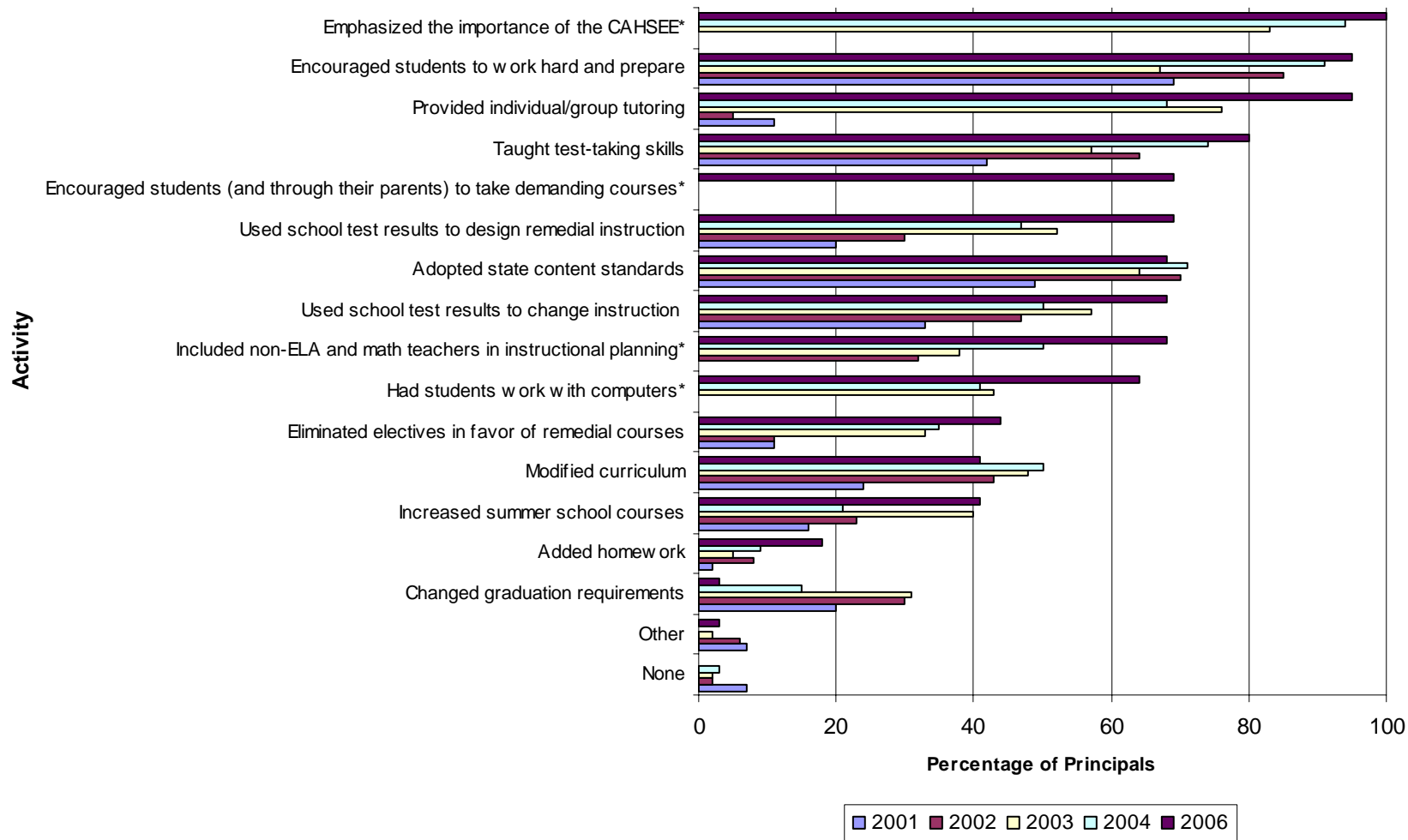
In general, preparatory activities have increased since this evaluation began in 2001. According to principal responses, the following activities increased substantially in 2006: (a) providing individual/group tutoring, (b) having students work with computers, (c) using school test results to design remedial instruction, and (d) offering summer

school courses. One hundred percent of principals reported they emphasize the importance of the CAHSEE. On the other hand, three activities seemed to drop off in 2006, perhaps reflecting the fact that the CAHSEE is a more mature program (e.g., changing graduation requirements, modifying curriculum, adopting state content standards). Teachers indicated increased inclusion of non-ELA and non-math teachers in instructional planning for the CAHSEE, using class test results to change instruction, providing individual/group tutoring, and teaching test taking skills in 2006. Responses indicating “encouraging summer school attendance” and “working with feeder-school teachers”, however, have decreased over the years. As a percentage, slightly fewer teachers indicated they had increased their attention to content standards. As with the principal results, this activity may have experienced a drop-off in ratings due to the CAHSEE being a more mature program.

Table 4.12. Percentage of Principals Undertaking Activities to Prepare Faculty/Staff for the CAHSEE Administration

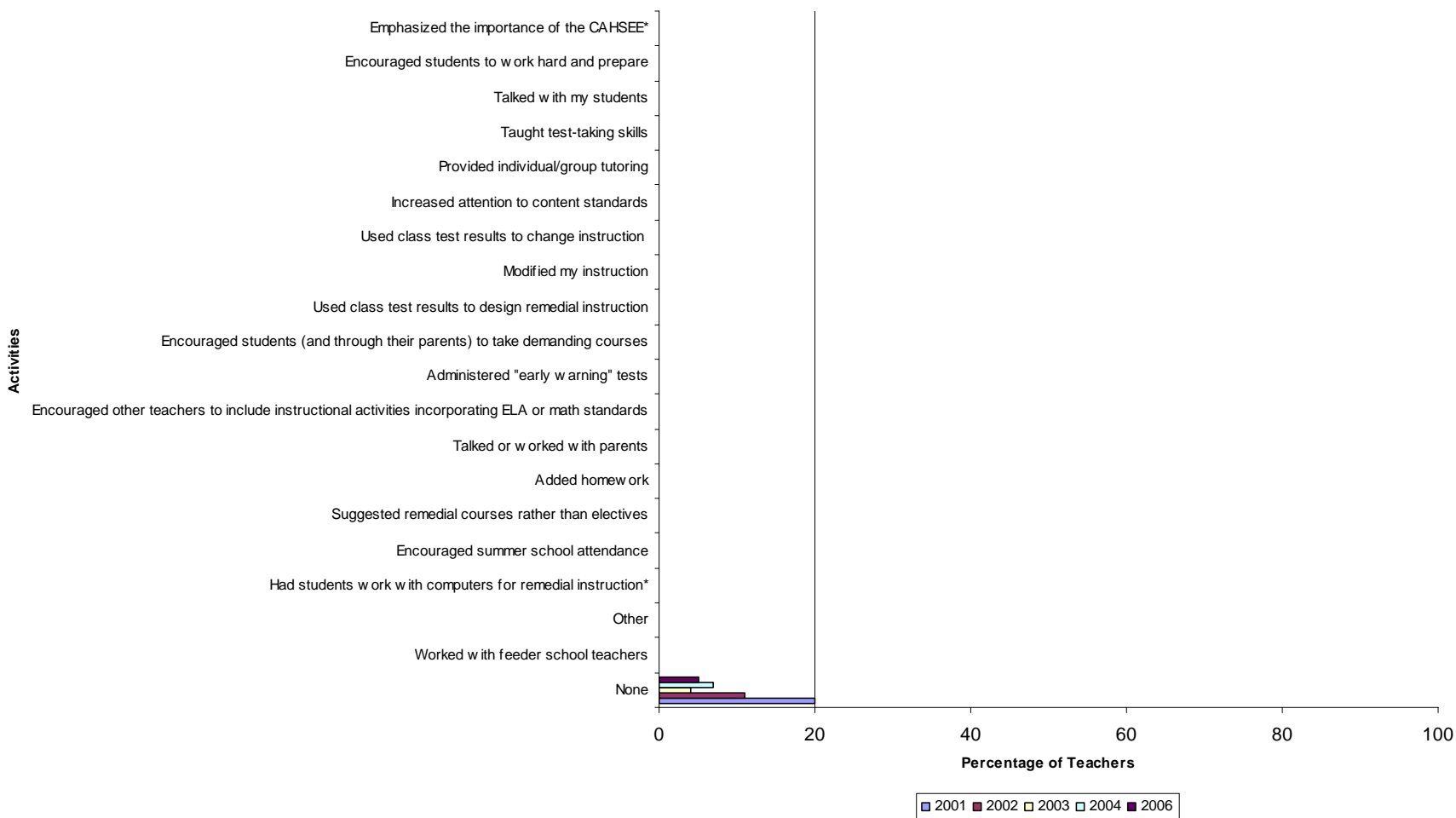
Activities of Administrators	2001	2002	2003	2004	2006
Participated in test administration workshops	71	70	67	71	86
Provided test taking strategies	42	61	67	65	75
Delivered local workshops on CAHSEE content (e.g., used Teacher Guides as a focal point for discussion)	36	41	62	59	66
Delivered local workshops on test administration	58	48	43	50	61
Other	7	8	12	12	21
No special preparation	9	4	5	9	5

Note. Respondents could select multiple responses, thus the columns total more than 100 percent.



* Question not asked in all years.

Figure 4.1a. Percentage of principals reporting activities undertaken in preparation for the spring 2001, 2002, 2003, 2004, and 2006 administrations of the CAHSEE.



* Question not asked in all years.

Figure 4.1b. Percentage of teachers reporting activities undertaken in preparation for the spring 2001, 2002, 2003, 2004, and 2006 administrations of the CAHSEE.

Principals identified the three activities they consider the most important in CAHSEE preparation. Fifty-five percent of principals indicated that providing individual/group tutoring was among the top three; 51 percent identified emphasizing the importance of the CAHSEE; 29 percent identified using school test results to change instruction; 26 percent selected both adoption of state content standards and teaching test-taking skills; 24 percent identified both using school test results to design remedial instruction and encouraging students to work hard and prepare; and 22 percent selected including teachers other than ELA and math in instruction planning for the CAHSEE. Teachers also were asked to indicate the three most important activities. Teachers rated activities in the following order of importance: teaching test-taking skills (44%), emphasizing the importance of the CAHSEE (43%), encouraging students to work hard and prepare (30%), increasing classroom attention to content standards covered by the CAHSEE in the weeks preceding the CAHSEE administration (28%), and providing individual/group tutoring (26%).

Principals and teachers were asked to rate the influence of the CAHSEE on instructional practices in their schools (PR-27, T-22). Table 4.13 indicates that both groups perceived positive effects thus far, with the majority of principals and teachers reporting the CAHSEE has improved instructional practices. These results are very similar to 2004 data.

Table 4.13. Principal and Teacher Ratings of Influence of the CAHSEE on Instructional Practices (in percentages) (Principal N=51; Teacher N=202)

Effect on Instructional Practices	Principal	Teacher
Considerably improved	16	9
Improved	59	57
No effect	25	29
Weakened	0	4
Considerably weakened	0	1

Note. Column totals may not equal 100 percent due to rounding.

Principals were asked the extent to which several activities have been implemented to promote learning for all students, and the extent to which financial constraints have limited their ability to provide these services during the past four years. Table 4.14 summarizes results from all three questions. The left half of the table indicates the extent to which each service has been implemented; a majority of principals reported that every listed activity has been partially/fully implemented (PR-33). Next, for each activity the right half of the table addresses financial constraints. The top line for each activity depicts the extent to which financial constraints have had an effect over the past four years (PR-31); the bottom line predicts impact in the next few years (PR-32). A majority of principals reported that every activity has been affected to a slight/moderate extent. In every case except "School, teacher, and student access to appropriate instructional materials" and "Remediation [courses for students who did not initially pass the CAHSEE]" more principals predicted greater financial constraints in the future than in the past.

Table 4.14. Extent to Which Services Have Been Implemented to Promote Learning for All Students and Related Financial Constraints, According to Principals (in percentages) (N=51)

Activity	To what extent has your school implemented these services to promote learning for all students?				To what extent have/will financial constraints limit(ed) your ability to provide these services?				
	No Plan to Implement	Plan to Implement	Partially Implemented	Fully Implemented		Not At All	To a Slight Extent	To a Moderate Extent	To a Great Extent
School, teacher, and student access to appropriate instructional materials	0	2	21	77	Past 4 years	57	25	14	5
					Near future	50	32	16	2
CAHSEE prep classes to prepare students to take the CAHSEE	0	7	41	52	Past 4 years	N/A	N/A	N/A	N/A
					Near future	N/A	N/A	N/A	N/A
Individual student assistance	2	9	41	48	Past 4 years	36	36	21	7
					Near future	25	43	30	2
Teacher and school support services	2	14	41	43	Past 4 years	36	39	21	5
					Near future	41	30	30	0
Student and parent support services	7	30	41	23	Past 4 years	32	48	14	7
					Near future	37	37	21	5
Teacher access to in-service training on content standards	5	5	34	57	Past 4 years	66	21	9	5
					Near future	57	27	14	2
Teacher access to in-service training on instructional techniques	2	9	41	48	Past 4 years	61	23	9	7
					Near future	55	25	18	2
Administrator and teacher access to in-service training for working with diverse student populations & different learning styles	2	14	46	39	Past 4 years	59	23	11	7
					Near future	55	25	16	5
Encourage all students to take Algebra 1	2	5	14	80	Past 4 years	N/A	N/A	N/A	N/A
					Near future	N/A	N/A	N/A	N/A
Remediation [courses for students who did not initially pass the CAHSEE]	5	5	36	55	Past 4 years	36	34	21	9
					Near future	36	36	18	9

Note. Row totals may not equal 100 percent due to rounding.

Comparisons among principals' 2001, 2002, 2003, 2004, and 2006 estimates of actions the school has implemented to promote learning for all students are presented in Table 4.15. In every case, a smaller percentage of principals indicated that the activities were fully implemented than in 2004. Activities presented in bold in Table 4.13 decreased to a percentage lower than both 2003 and 2004, and the one activity in which the percentage decreased compared to 2002 only is also underlined.

Table 4.15. Percentage of Principals Indicating Actions to Promote Student Learning

Action	Fully Implemented				
	2001	2002	2003	2004	2006
Encouragement of all students to take Algebra I	45	65	72	97	80
School, teacher, and student access to appropriate instructional materials	54	57	54	85	77
Teacher access to in-service training on content standards	50	58	60	73	<u>57</u>
Remediation courses for students who do not initially pass the CAHSEE	N/A	N/A	N/A	N/A	55
CAHSEE prep classes to prepare students to take the CAHSEE	N/A	N/A	N/A	N/A	52
Teacher access to in-service training on instructional techniques	47	45	50	64	<u>48</u>
Individual student assistance	27	33	43	50	48
Teacher and school support services	24	29	41	52	43
Administrator and teacher access to in-service training for working with diverse student populations and different learning styles	33	23	49	53	39
Student and parent support services	17	5	10	27	23

Note 1. Decreases indicating percentages lower than both 2003 and 2004 are noted in bold.

Note 2. The decrease indicating a percentage lower than 2004 only is denoted by an underline.

Note 3. Respondents could select multiple responses, thus the columns total more than 100 percent.

Principals were asked the extent to which the CAHSEE draws away resources from several course categories (PR-25). Table 4.16 lists the categories in descending order of impact as indicated in 2006 survey results. About one-quarter of the principals indicated that the CAHSEE drew resources away from courses in the arts and vocational courses to a moderate/great extent. Courses in other academic subject areas were impacted to a lesser, but discernible, extent. Two principals (4%) used the comment space to note that CAHSEE draws resources away from general elective courses. Compared to 2004, principals reported CAHSEE drawing resources away to a considerably lesser extent.

Table 4.16. Extent to Which the CAHSEE Draws Resources Away from Various Categories of Courses, According to Principals (in percentages) (N=51)

Course Category	Extent to Which the CAHSEE Draws Resources Away			
	Not At All	To a Slight Extent	To a Moderate Extent	To a Great Extent
Vocational courses	46	30	9	16
Courses in the arts	43	30	16	11
Courses in other academic subject areas	43	27	23	7
Advanced courses	67	19	9	5
Other	25	50	25	0

Note. Row totals may not equal 100 percent due to rounding.

Use of the CAHSEE Results

In addition to any effect of the CAHSEE, the surveys inquired about future plans to deal with the CAHSEE requirement. In particular, the survey queried principals on efforts to prepare specific populations of students for the exam (e.g., students with disabilities, English learners), information used to identify students at risk of not succeeding on the CAHSEE, and about remediation plans subsequent to exam administration.

The survey provided principals with a list of possible remedial practices for students who do not pass the CAHSEE or do not seem prepared to take it (PR-22). Principals were asked the degree to which each activity has been implemented on a scale of: no plans to implement, plan to implement, partially implemented, and fully implemented. None of the principals indicated that they had no special plans to assist these students. Six percent (3 out of 51) stated that they have plans for assisting high school students who do not pass the exam and are not prepared for the test. Their plans consist of Saturday academies courses, parent classes, and developing consistent communication. Table 4.17 lists the percentage of principals who indicated plans to implement each activity in 2002, 2003, 2004, and 2006. Activities with consistently increasing implementation are listed in bold. These increased activities reveal a few themes. First, they indicate a focus on content alignment including ensuring that demanding courses are offered from the beginning. Several other activities focus on content alignment, which increased through 2004 but then decreased in 2006 to between 2003 and 2004 percentages: adopting state content standards, altering the high school curriculum, and ensuring that students are taking demanding courses. Second, a broad, systemic approach to the CAHSEE is evident in the increased implementation of activities such as involving teachers other than ELA and mathematics teachers in instructional planning for the CAHSEE. Ratings increased for working with feeder middle schools until 2006 when the rating dropped lower than 2003 levels. The development of parent support programs, while still not widespread, shows an increase over the years. Table 4.17 also indicates that three activities (in addition to the four mentioned above) were less frequently implemented than in the previous survey year: having students work with computers, adding homework, evaluating high school students' abilities and placing them in courses/programs accordingly. These are

indicated by underlined percentages in the table. It is not clear whether this pattern reflects an actual decrease in the activities or an increase in the intended level of implementation. Finally, three activities showed a large increase from 2004 ratings (listed in bold and underline): increasing high school remedial courses, reducing high school electives in favor of remedial classes, and providing individual/group tutoring.

Table 4.17. Percentage of Principals Indicating Plans for Activities to Assist High School Students Who Do Not Pass the Exit Exam or Who Do Not Seem Prepared to Take It

Activity	Status	2002	2003	2004	2006
Increased high school remedial courses	Fully Implemented	10	33	<u>17</u>	<u>46</u>
	Partially Implemented	33	37	41	37
	Plan to Implement	24	10	24	2
	No Plan to Implement	33	20	17	15
Reduced high school electives in favor of remedial classes	Fully Implemented	5	13	<u>14</u>	<u>37</u>
	Partially Implemented	5	33	36	29
	Plan to Implement	16	27	11	0
	No Plan to Implement	74	27	39	34
Increased high school summer offerings	Fully Implemented	45	43	31	44
	Partially Implemented	15	0	0	23
	Plan to Implement	10	32	52	18
	No Plan to Implement	30	25	17	15
Provided individual/group tutoring	Fully Implemented	29	45	<u>40</u>	<u>67</u>
	Partially Implemented	38	16	0	29
	Plan to Implement	24	32	53	5
	No Plan to Implement	10	6	7	0
Had students work with computers	Fully Implemented	N/A	23	<u>31</u>	<u>29</u>
	Partially Implemented	N/A	50	38	49
	Plan to Implement	N/A	17	14	12
	No Plan to Implement	N/A	10	17	10
Added homework	Fully Implemented	10	0	<u>17</u>	<u>11</u>
	Partially Implemented	10	0	17	17
	Plan to Implement	21	12	8	6
	No Plan to Implement	58	88	58	66
Adopted California Content Standards	Fully Implemented	45	82	<u>88</u>	<u>85</u>
	Partially Implemented	55	18	13	12
	Plan to Implement	0	0	0	2
	No Plan to Implement	0	0	0	0
Altered high school curriculum	Fully Implemented	5	34	<u>39</u>	<u>36</u>
	Partially Implemented	62	38	45	25
	Plan to Implement	29	14	6	6
	No Plan to Implement	5	14	10	33
Included teachers other than ELA and math in instructional planning for the CAHSEE	Fully Implemented	16	26	31	39
	Partially Implemented	42	32	31	44
	Plan to Implement	42	29	22	10
	No Plan to Implement	0	13	16	8

Table 4.17. (Continued)

Activity	Status	2002	2003	2004	2006
Worked with feeder middle schools	Fully Implemented	5	18	<u>28</u>	<u>15</u>
	Partially Implemented	55	29	38	46
	Plan to Implement	10	21	22	18
	No Plan to Implement	30	32	12	21
Developed parent support program	Fully Implemented	0	0	11	14
	Partially Implemented	25	25	25	39
	Plan to Implement	50	25	25	22
	No Plan to Implement	25	50	39	25
Used school test results to change high school instruction	Fully Implemented	5	25	23	39
	Partially Implemented	65	50	61	46
	Plan to Implement	30	19	10	10
	No Plan to Implement	0	6	6	5
Evaluated high school students' abilities and placed them in courses/programs accordingly	Fully Implemented	23	57	<u>55</u>	<u>47</u>
	Partially Implemented	43	27	36	49
	Plan to Implement	19	13	6	5
	No Plan to Implement	14	3	3	0
Ensured that students are taking demanding courses from the beginning	Fully Implemented	20	53	<u>64</u>	<u>57</u>
	Partially Implemented	50	27	26	38
	Plan to Implement	20	13	10	5
	No Plan to Implement	10	7	0	0
Ensured we are offering demanding courses from the beginning	Fully Implemented	25	43	64	65
	Partially Implemented	55	40	26	32
	Plan to Implement	20	10	10	3
	No Plan to Implement	0	7	0	0
Other	Fully Implemented				100
	Partially Implemented				0
	Plan to Implement				0
	No Plan to Implement				0

Note 1. Percentages of 2002 respondents are based on the 21/47 respondents who answered this series of questions.

Note 2. Percentages of 2003 respondents are based on the 33/42 respondents who answered this series of questions.

Note 3. Discernable increases in implementation over the years are noted in bold. Discernable decreases in implementation over the years are noted with underline. Discernable increases in implementation from 2004 to 2006 are noted with bold and underline.

Note 4. Column totals by activity may not equal 100 percent due to rounding.

Figure 4.2 presents the same information shown in Table 4.17 for 2006 only, as a percentage of those responding. Activities are listed in descending order of endorsement; thus, those activities that most responding principals rated as fully implemented are listed first.

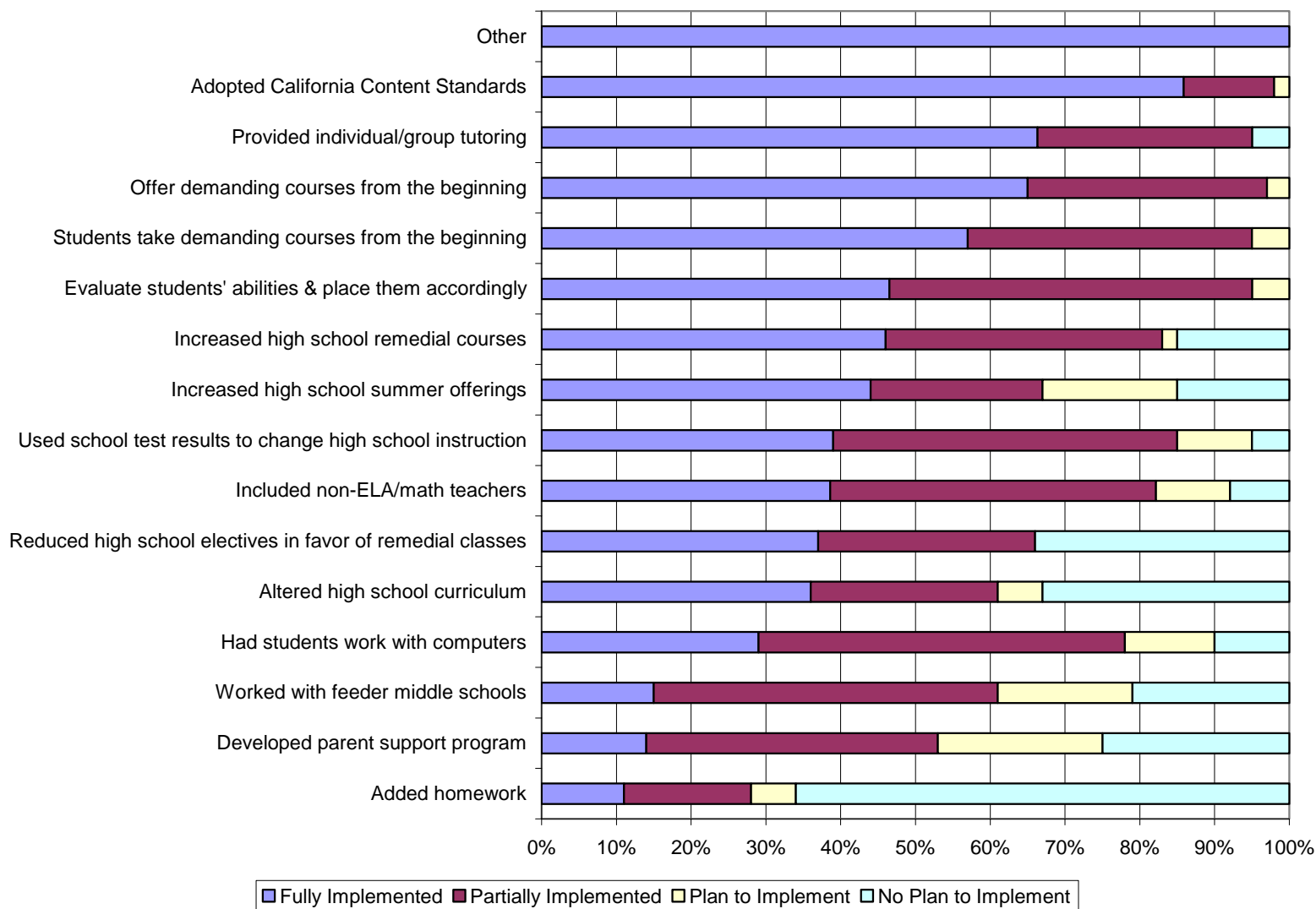


Figure 4.2. Percentage of principals in 2006 reporting plans for remediation of students who do not pass the CAHSEE (N=51).

Principals were asked what information they use to identify students who are at risk of not passing the CAHSEE or scoring Below Basic (or Far Below Basic) on the CST (California Standards Test) (PR-14). A substantial proportion of respondents selected all but one of the listed options. In descending order, they were: CST results (89%), district assessments (68%), teacher judgment (57%), district end-of-course results (43%), and other (14%). Principals reported using NRT (norm-referenced test) results to identify these students at a rate of only 7 percent. Five principals (10%) provided other responses such as using CAHSEE results, teacher recommendations, Individual Education Plan (IEP) information and English learner data to identify students who are at risk of not passing the exit exam. Principals rated information used to identify these students considerably higher in 2004: (a) teacher judgment (71%), (c) district end-of-course results (56%), and (d) NRT results (38%).

Principals were asked to indicate the plans and strategies they and their faculty/staff have implemented to address participation in the CAHSEE by students with disabilities (PR-34). None of the principals indicated that they had no plans or strategies implemented, while one said the school had no students with disabilities. Ninety-six percent indicated their school followed the IEP/504 plan with 75 percent having modified the IEP/504 plan for their school. Eighty-nine percent provided accommodations and/or additional assistance to students with disabilities, and 84 percent provided modifications to address participation in the CAHSEE for these students. Another 82 percent said they mainstreamed students with disabilities. Fifty-nine percent indicated they encouraged staff development in special education, 46 percent offered special academic work programs, and 7 percent said some other plan or strategy was implemented. Three principals (6%) provided additional comments such as tutorial sessions, administrative interventions, and student success team for students with disabilities. This question previously elicited an open-ended response.

A similar question asked principals about plans or strategies to help English learners (EL) overcome language barriers in order to succeed in meeting the requirements of the CAHSEE (PR-35). Eighty-two percent of principals stated that they provided accommodations and/or additional assistance, 80 percent indicated that EL students were being mainstreamed, and 75 percent stated that they encouraged staff development in EL education. Fifty percent said they provided modifications to English learners, while 46 percent stated that special academic work programs were available. Five percent stated that there were no EL students in their schools. Another 3 percent said there was no plan to address the language barrier and 11 percent said some other plan or strategy was implemented. Five principals (10%) reported English learners are given tutorial sessions, English language development (ELD) and Specially Designed Academic Instruction in English (SDAIE) classes, test taking strategies, a glossary of terms, and a student success team to help overcome any barriers. Again, this question previously elicited an open-ended response.

For the first time, principals were asked to indicate which options were available to seniors who do not pass both parts of the CAHSEE (PR-24). Seventy-seven percent said that the GED was available; 75 percent, summer program with retesting; 68

percent, certificate of completion; 64 percent, high school diploma through community college; 46 percent, retention in 12th grade; and 11 percent, other certificate. There are a few other options available for seniors who do not pass both parts of the exam. Five principals (10%) indicated options such as requiring the student to participate in a 5th year program or adult education/schools.

State Content Standards

To prepare students for a statewide assessment, district and state content standards should align. In addition, school curricula (i.e., what students are actually taught) should reflect the standards set by the state. However, there is a difference between “teaching to the test” and “aligning the curriculum and instruction to the standards,” with the latter being the goal. In order for teachers to have a role in this effort, they need access to the standards and encouragement to use them in guiding instruction.

One precursor to a successful statewide program is to align school curricula with the state content standards to ensure that students are being taught the materials from which test items will draw. Thus we queried respondents about alignment with state content standards (PR-11). Table 4.18 presents comparison data of responses given across survey years regarding preparations made to align curricula with the California Content Standards. As the CAHSEE program has matured, there has been a decrease in preparatory activities such as aligning curriculum with state content standards (dropping from 81% of principals in 2000 to 29% in 2006) and an increase in activities such as ensuring that all students receive instruction in each of the content standards (from 40% in 2001 to 71% in 2006). Based upon other survey responses, the decrease in recent alignment activities seems to reflect a high degree of alignment already in place.

Principals were asked to compare their district standards and the state content standards (PR-9, PR-10). Table 4.19 presents comparison data on the similarity between district and state standards across six of the seven survey years. Overall, alignment between state and district standards is quite high, with 77 percent of districts adopting the state standards and 21 percent of districts adopting standards that extend beyond the state requirements. Two percent (i.e., one principal) indicated that the state standards include more than that district’s standards. These responses were identical for ELA and math. No principals indicated that they could not judge the relationship between their districts standards and the state standards.

Table 4.18. Principals' Reported Percentages of Preparations for Alignment with California Content Standards

Preparation	2000	2001	2002	2003	2004	2006
Districts/schools encourage the use of content standards to organize instruction	100	91	96	93	91	80
Textbooks align well with content standards	74	56	81	74	N/A	N/A
Math	N/A	N/A	N/A	N/A	82	77
ELA	N/A	N/A	N/A	N/A	79	71
Have plans to ensure all high school students receive instruction in each of the content standards	52	40	45	57	53	71
Hiring only teachers certified in their field	N/A	N/A	43	60	74	65
Assigning teachers only in their certified field	N/A	N/A	49	60	47	61
Cover all content standards with a mix of textbooks and supplemental materials	38	44	47	50	56	51
Have plans to ensure that all pre-high school students are prepared to receive instruction in each of the content standards	N/A	N/A	30	36	41	43
In process of aligning curriculum across grade levels	N/A	N/A	72	38	44	31
In process of aligning curriculum with state content standards	81	56	74	38	29	29

Note 1. N/A indicates a question was not asked in a given survey year.

Note 2. Respondents could select multiple responses, thus the columns total more than 100 percent.

Table 4.19. Percentage of Principals Reporting Similarity between District and State Standards

Similarity Between Standards	Content Area	2000	2001	2002	2003	2004	2006
District adopted state standards	ELA		67	72	79	76	77
	Math	69	71	74	79	82	77
District standards include more than state standards	ELA		29	17	21	21	21
	Math	19	22	15	18	18	21
State standards include more than district standards	ELA		2	2	0	3	2
	Math	7	4	2	0	0	2
I cannot judge	ELA		2	8	0	0	0
	Math	5	2	8	3	0	0

Note 1. 2000 survey did not distinguish between ELA and Math standards.

Note 2. 2001 survey provided option of "District does not have official set of content standards" which has been included into the "I cannot judge" category.

Note 3. 2002 survey provided options of: (a) "Content standards different" and (b) "District does not have official set of content standards" which have been included into the "I cannot judge" category.

Along similar lines, teachers were asked at what level their schools' current curriculum covers the standards tested by the CAHSEE (T-14, T-15). Tables 4.20a and 4.20b provide further information on this item for ELA and mathematics, respectively. The majority of the teachers indicated that almost all of the standards are covered by their school's curriculum. While respondents indicated similar coverage of standards for math and ELA for "about $\frac{3}{4}$ " and "almost all," the responses indicated that coverage for ELA was slightly more complete than that for math. The lower math ratings, however, may be an artifact of most CAHSEE math content being introduced before high school. The CAHSEE ELA test, on the other hand, includes content standards introduced in grades nine and ten. None of the ELA teachers reported that their school's curriculum covered less than one quarter of the content standards whereas 6 percent of math teachers estimated that their school's curriculum covered less than a quarter of the content standards. Another 2 percent of math teachers and 9 percent of ELA teachers indicated that they had no knowledge of the content standards. In 2006, more teachers reported their curriculum covered "about $\frac{3}{4}$ " and "almost all" ELA and mathematics standards compared to 2004. Taking these together ("about $\frac{3}{4}$ " and "almost all"), both ELA and mathematics curriculum has covered the standards to a high degree since 2004 (ELA at a range of 79–86 percent, mathematics at a range of 68–84 percent).

Table 4.20a. Percentage of Teachers Indicating Coverage of ELA Standards by Curriculum

Coverage of Standards	2001	2002	2003	2004	2006
Almost all	60	54	57	57	70
About $\frac{3}{4}$	20	28	28	22	16
About $\frac{1}{4}$ – $\frac{1}{2}$	11	13	15	6	5
Less than $\frac{1}{4}$	6	4	0	3	0
No knowledge of standards	3	1	0	12	9

Note. Column totals may not equal 100 percent due to rounding.

Table 4.20b. Percentage of Teachers Indicating Coverage of Mathematics Standards by Curriculum

Coverage of Standards	2001	2002	2003	2004	2006
Almost all	57	72	64	55	67
About $\frac{3}{4}$	14	17	13	13	17
About $\frac{1}{4}$ – $\frac{1}{2}$	16	9	16	11	8
Less than $\frac{1}{4}$	5	3	4	0	6
No knowledge of standards	8	0	4	21	2

Note. Column totals may not equal 100 percent due to rounding.

One common criticism of the instructional impact of standardized tests is the tendency for teachers to "teach to the test," effectively narrowing the curriculum to prepare students to do well on the test at the expense of other instruction. The policy intent of a program such as the CAHSEE is not to have teachers focus their instruction on passing the test, but rather to align curriculum with content standards—some of which are then tested. Principals were asked what percentage of their teachers they thought understood the difference between "teaching to the test" and "aligning the curriculum and

instruction to the standards” (PR-17). The results from five annual surveys are displayed in Figure 4.3. Throughout the survey years, principals have consistently estimated that the majority of teachers understand this difference and there has been a notable increase in the past two survey years. That is, in 2003, 77 percent of principals said 50–100% of teachers understand this difference. In 2004, 91 percent of principals estimated the majority of teachers understood the difference; in 2006, that percentage was 93 percent.

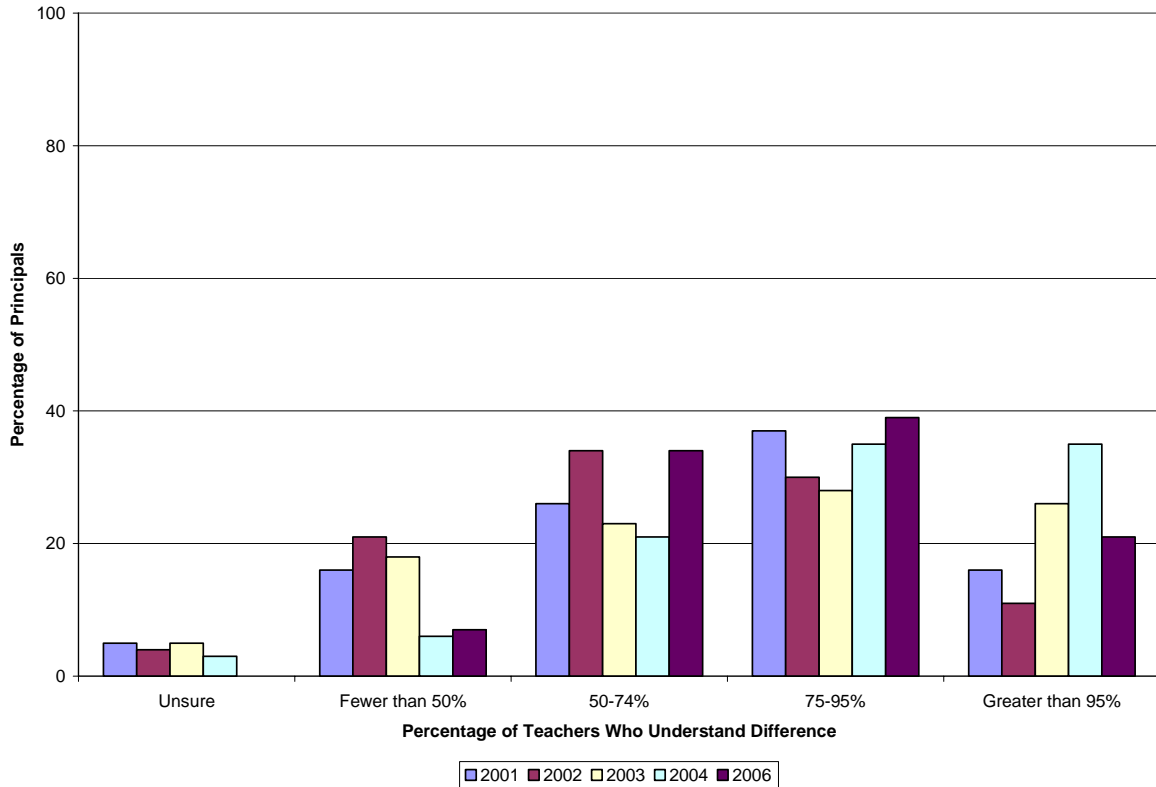


Figure 4.3. Percentage of principals indicating the percentage of teachers who understand the difference between “teaching to the test” and “aligning the curriculum and instruction to the standards” in 2001, 2002, 2003, 2004, and 2006.

An intermediate step in ensuring teachers are aligning their curricula to the content standards is to put the standards in the hands of the teachers. Principals were asked what percentage of their teachers has copies of the CST/CAHSEE blueprints (PR-18), as well as what percentage of teachers uses the blueprints for lesson planning (PR-19). Table 4.21 indicates that while four-fifths of principals report that more than half their teachers have a copy of the blueprint, a substantially smaller proportion of teachers uses those blueprints in instructional planning.

Principals were probed further on this question of whether teachers teach to the standards. The principal survey asked what evidence the principal collects to verify that teachers are using standards documents, frameworks, and/or blueprints (PR-20). More than three-fourths of the principals reported they conduct classroom visits, have related

discussions at faculty meetings, conduct goal setting and other individual conferences, collect reports from department chairs or others responsible for supervising instruction, and collect teacher-generated instructional and assessment materials. Table 4.22 lists the offered sources, in decreasing order of endorsement.

Table 4.21. Percentage of Principals Indicating the Percentage of Teachers Who Have/Use the California Standards Test (CST)/CAHSEE Blueprints (N=51)

Percent of Teachers	Have a Copy of Blueprint	Use the Blueprints for Instructional Planning
Greater than 95%	32	0
75–95%	32	27
50–74%	16	41
Fewer than 50%	16	27
Unsure	5	5

Note. Column totals may not equal 100 percent due to rounding.

Table 4.22. Percentage of Principals Who Gather Evidence That ELA and Math Teachers Are Teaching to the Standards (N=51)

Types of Evidence	ELA Teachers	Math Teachers
Classroom visits—walk-through or other informal interactions	95	95
Discussions at faculty meeting	93	91
Goal setting and other individual conferences	84	84
Reports from department chairs or others responsible for supervising instruction	77	79
Teacher-generated instructional and assessment materials	77	77
School or district level in-service	72	74
Other	16	16

Note. Column totals may not equal 100 percent due to rounding.

Expectations

Several survey questions queried the respondents' expectations for the exam: anticipated pass rates, impact of the exam on student motivation and parental involvement, and so on. Principals were asked about specific benefits and challenges for their school and students associated with successfully meeting the requirements of the CAHSEE.

Teachers rated 10th grade students' preparedness to pass the CAHSEE (T-16). Table 4.23 compares responses to this question over multiple years of teacher surveys. The 2000 survey was administered before the CAHSEE was ever administered to any students, so reflected the least-informed expectations. The Spring 2002 rating was an estimate of how prepared that year's freshmen would be in the 10th grade. The 2003, 2004, and 2006 ratings indicate how prepared teachers' current 10th graders were. Ratings showed a steady increase in preparedness over time with 48 percent of students in the 10th grade deemed "very well prepared" or "prepared" to pass the CAHSEE in 2006.

Table 4.23. Teachers' Ratings of Preparedness of Students in the 10th Grade (in percentages)

Preparedness	2000	2001	2002	2003	2004	2006
Very well prepared	2	3	5	5	8	14
Well prepared	10	17	15	21	25	34
Prepared	33	47	38	44	37	36
Not well prepared	50	28	39	26	28	14
Not at all prepared	5	5	3	4	2	1

Note. Column totals may not equal 100 percent due to rounding.

Principals and teachers were also asked to predict the impact of the CAHSEE on student motivation and parental involvement, under various circumstances: prior to the first administration of the exam, for students who pass, and for students who do not pass (PR-26, T-21). Table 4.24 lists the percentage of respondents selecting each possible impact, for each of the years this question was asked. Predicted impacts on student motivation are positive for all three student categories. Predicted impact on parental involvement is positive for parents of students who do not pass the CAHSEE on the first attempt, and neutral-to-positive for the other two categories. Notably, some of the early predictions of negative impact dissipated markedly after 2001.

Figures 4.4a and 4.4b reflect the percentage of respondents who predicted “increased” or “strongly increased” impact on these same questions. Response patterns are included for all years this question was included in the survey administration. This graph facilitates comparison of the predicted positive effects for various groups. In the early years of the CAHSEE (2000 and 2001), principals anticipated more of a positive motivational effect on students who passed the exam, relative to those students who did not pass. However, in the later years as familiarity with the CAHSEE increased, this pattern reversed and, in 2006, became very pronounced. The majority of principals now predict that students will have increased motivation due to the CAHSEE across all categories, and students who do not pass will be more motivated by the CAHSEE than students who do pass. Principals' predictions of effects on parental involvement are weaker than on student motivation. Principals predict a substantial boost in parental involvement for students who do not pass.

Teachers continue to be less optimistic than principals regarding student exam motivation and parental involvement (see Table 4.25 and Figure 4.4b). However, teachers' predictions of student motivation across the three aspects increased from 2004 to 2006. Predicted impacts on parental involvement remained steady from 2004 to 2006 for students passing on the first attempt and increased for students not passing on the first attempt.

Table 4.24. Principals' Predicted Impact of the CAHSEE on Student Motivation and Parental Involvement (in percentages)

Impact	Student Motivation						Parental Involvement					
	2000	2001	2002	2003	2004	2006	2000	2001	2002	2003	2004	2006
Impact prior to first administration												
Strongly positive/ Strongly increased	2	4	11	24	25	43	0	5	7	3	6	7
Positive/Increased	45	42	69	55	53	48	32	23	39	29	32	43
No effect	19	29	20	13	22	7	56	68	52	63	62	50
Negative/Decreased	17	20	0	8	0	2	7	3	2	3	0	0
Strongly negative/ Strongly decreased	17	4	0	0	0	0	5	3	0	3	0	0
Impact for students who pass on 1st attempt												
Strongly positive/ Strongly increased	12	7	7	13	21	18	12	5	2	3	6	5
Positive/Increased	50	50	54	42	33	36	33	37	24	19	21	30
No effect	33	32	36	42	42	46	50	56	74	68	73	61
Negative/Decreased	5	9	2	3	3	0	2	0	0	8	0	5
Strongly negative/ Strongly decreased	0	2	0	0	0	0	2	2	0	3	0	0
Impact for students who do not pass on 1st attempt												
Strongly positive/ Strongly increased	2	2	11	11	12	5	2	2	12	5	18	18
Positive/Increased	34	34	59	54	49	82	41	42	56	56	39	57
No effect	17	18	16	14	24	7	14	16	26	33	39	23
Negative/Decreased	37	34	11	16	12	7	36	30	7	3	3	2
Strongly negative/ Strongly decreased	10	11	2	5	3	0	7	9	0	3	0	0

Note 1. Wording of response options was changed from Positive/Negative to Increased/Decreased in 2002 survey administrations.

Note 2. Column totals by impact may not equal 100 percent due to rounding.

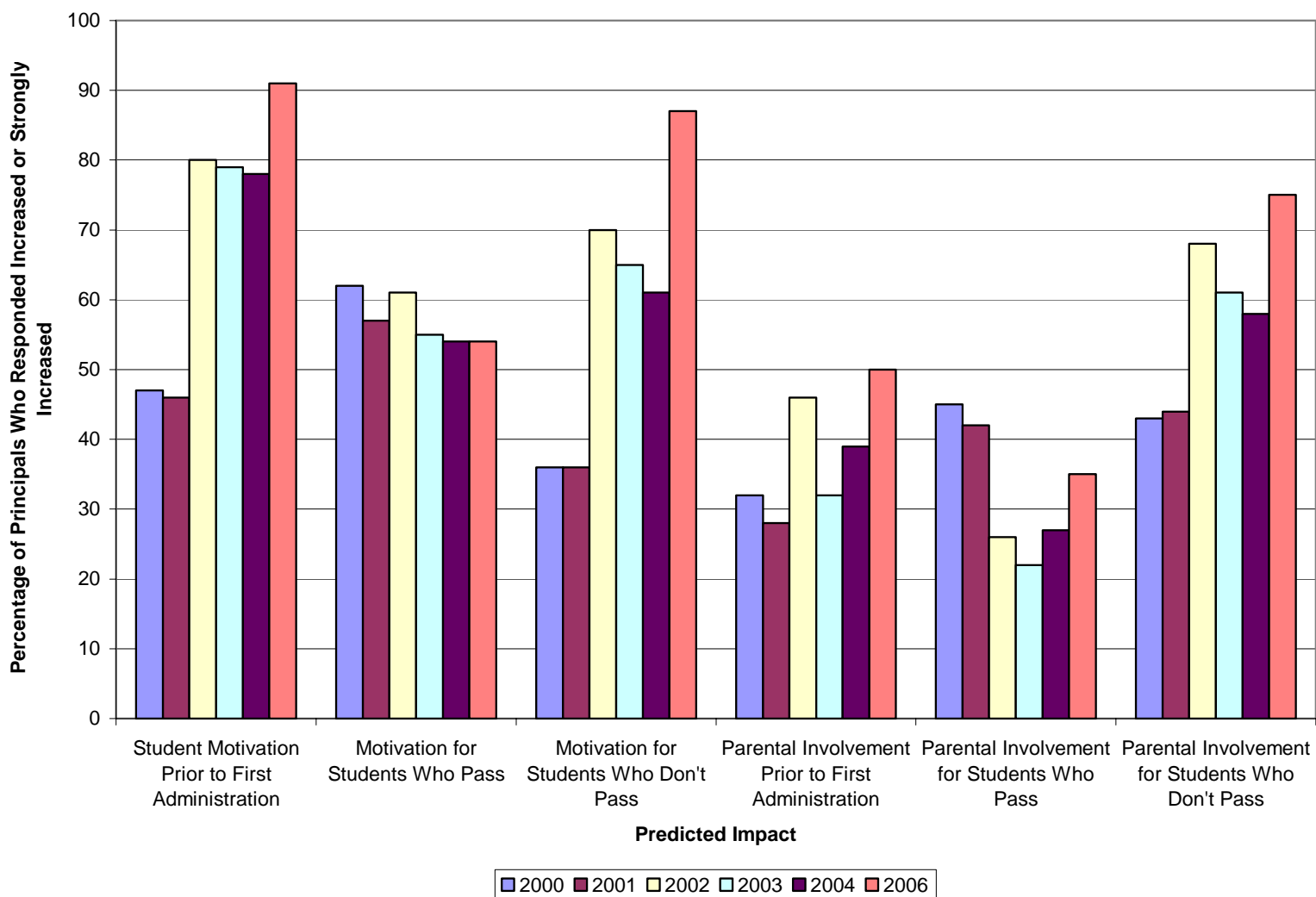
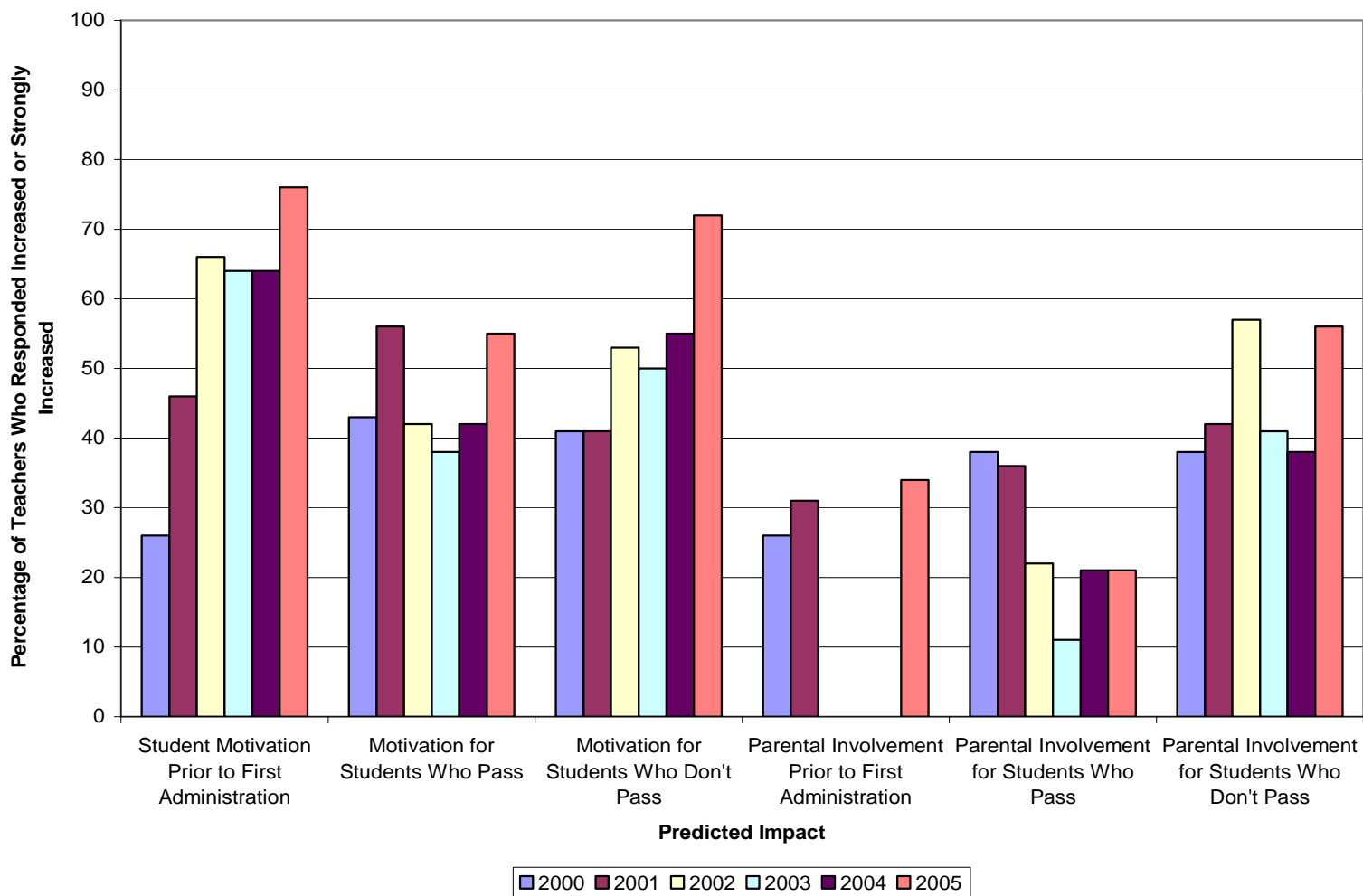


Figure 4.4a. Percentage of principals predicting increased or strongly increased student motivation and parental involvement in 2000, 2001, 2002, 2003, 2004, and 2006.

Table 4.25. Teachers' Predicted Impact of the CAHSEE on Student Motivation and Parental Involvement (in percentages)

Impact	Student Motivation						Parental Involvement					
	2000	2001	2002	2003	2004	2006	2000	2001	2002	2003	2004	2006
Impact prior to first administration												
Strongly positive/Strongly increased	4	4	6	6	7	10	3	3	N/A	N/A	N/A	3
Positive/Increased	26	42	60	58	57	66	23	28	N/A	N/A	N/A	31
No effect	28	35	29	25	31	22	54	61	N/A	N/A	N/A	63
Negative/Decreased	35	16	3	9	5	1	14	7	N/A	N/A	N/A	2
Strongly negative/Strongly decreased	8	4	1	2	1	1	6	1	N/A	N/A	N/A	2
Impact for students who pass on 1st attempt												
Strongly positive/Strongly increased	12	5	4	1	5	12	6	4	3	1	2	2
Positive/Increased	31	51	38	37	37	43	32	32	19	10	19	19
No effect	42	39	54	58	54	41	54	64	75	86	73	73
Negative/Decreased	12	5	3	3	4	4	5	0	4	3	5	5
Strongly negative/Strongly decreased	3	0	1	1	0	1	4	0	0	0	1	3
Impact for students who do not pass on 1st attempt												
Strongly positive/Strongly increased	4	4	5	5	3	16	2	4	7	3	2	4
Positive/Increased	37	37	48	45	52	56	36	38	50	38	36	52
No effect	18	23	24	24	32	15	32	32	41	55	57	41
Negative/Decreased	33	28	21	21	11	12	23	19	1	4	3	2
Strongly negative/Strongly decreased	8	8	3	6	2	2	6	7	1	0	2	1

Note. Column totals by impact may not equal 100 percent due to rounding.



Note: The question on parental involvement prior to the first administration was not asked in 2002 through 2004.

Figure 4.4b. Percentage of teachers predicting increased or strongly increased student motivation and parental involvement in 2000, 2001, 2002, 2003, 2004, and 2006.

Principals and teachers were also asked to predict the impact of the CAHSEE on student retention and dropout rates (PR-26, T-21). Table 4.26 provides detailed response patterns over the years this question was asked in the survey. Fewer principals in 2006 predicted the CAHSEE would decrease/strongly decrease student retention than in 2004 (also see Figure 4.5a). Additionally, more principals in 2006 than in 2004 predicted the CAHSEE would have no effect with other ratings staying fairly constant. With regard to dropout rates, although the shift in principals' predictions tended toward predicting no effect, there were substantially fewer principals predicting the CAHSEE would strongly increase the student dropout rate. Across the survey administration years, more principals than teachers predicted the CAHSEE would increase student dropout rates.

Teachers' 2006 predictions of the retention rate were very similar to those in 2004. Across the years, 35–36 percent of teachers predicted that the exam would result in an increased/strongly increased retention rate. Teachers' 2006 student dropout rate responses were also very similar to those in 2004. In these two years, 38–41 percent of teachers predicted that the CAHSEE would result in an increased/strongly increased dropout rate. Overall, principals' and teachers' dire predictions of increased dropout rates have diminished notably (see Figures 4.5a and 4.5b).

Table 4.26. Principals' and Teachers' Predicted Impact of the CAHSEE on Student Retention and Dropout Rates

Predicted Impact	Principals											
	Student Retention						Student Dropout					
	2000	2001	2002	2003	2004	2006	2000	2001	2002	2003	2004	2006
Strongly positive/ Strongly decreased	2	2	0	0	0	2	2	5	0	0	0	0
Positive/Decreased	14	7	19	18	18	7	12	9	7	8	3	7
No effect	29	36	46	31	33	43	21	7	25	15	24	43
Negative/Increased	41	41	26	38	46	46	41	50	52	51	52	50
Strongly negative/ Strongly increased	14	14	9	13	3	2	24	30	16	26	21	0
	Teachers											
	Student Retention						Student Dropout					
	2000	2001	2002	2003	2004	2006	2000	2001	2002	2003	2004	2006
Strongly positive/ Strongly decreased	0	1	1	0	2	1	1	1	1	0	2	1
Positive/Decreased	13	14	14	14	10	8	11	11	4	3	2	6
No effect	22	53	40	51	53	56	23	26	37	38	54	56
Negative/Increased	50	27	41	29	33	33	50	43	46	44	38	30
Strongly negative/ Strongly increased	14	5	4	6	2	3	16	18	12	16	3	8

Note 1. Column totals may not equal 100 percent due to rounding.

Note 2. Discernable changes in predicted impact are noted in bold.

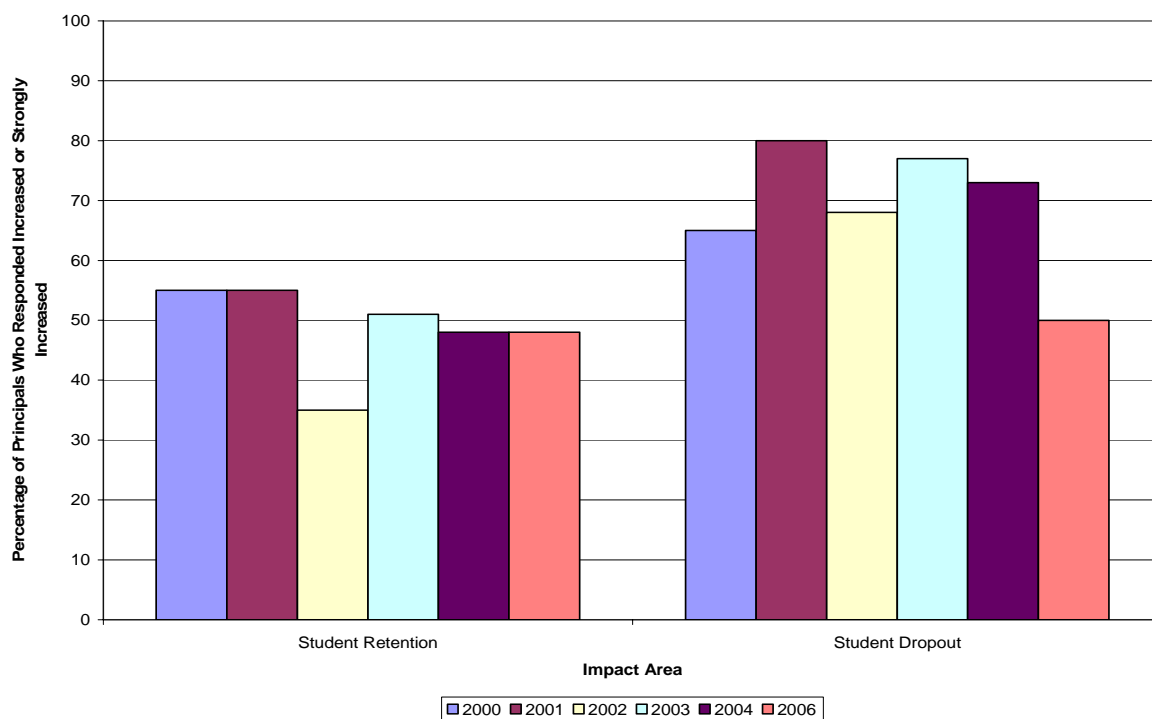


Figure 4.5a. Percentage of principals predicting increased or strongly increased student retention and dropout rates in 2000, 2001, 2002, 2003, 2004, and 2006.

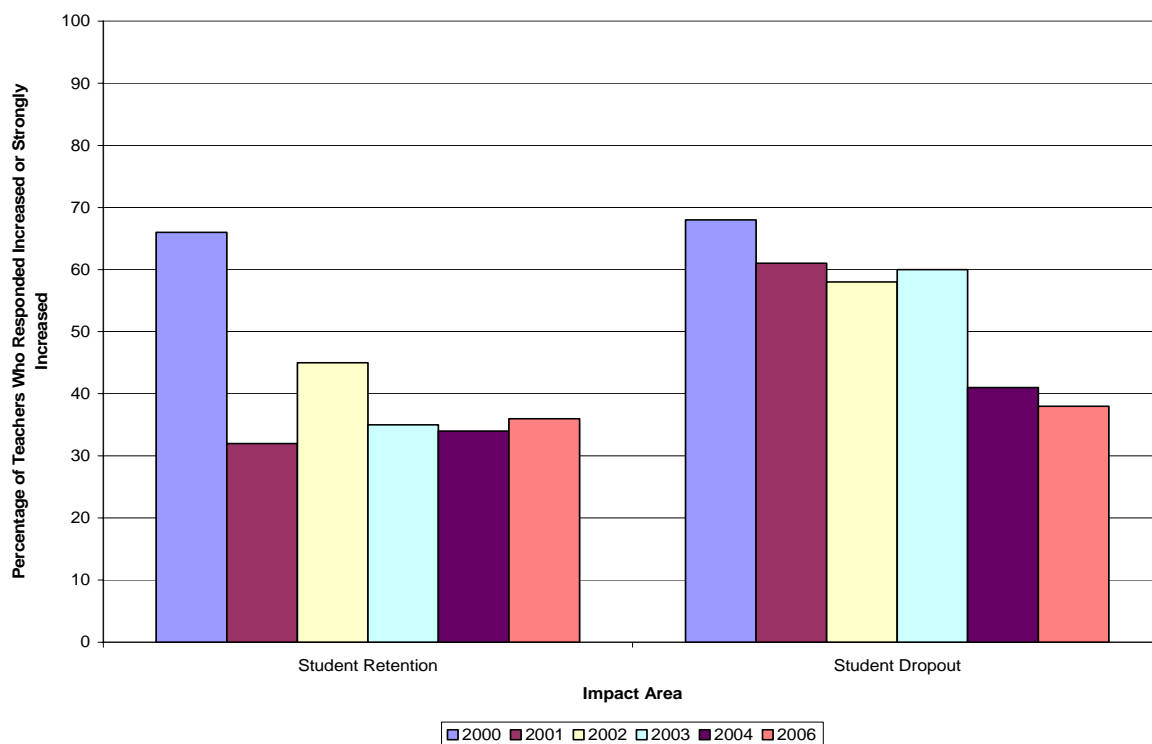
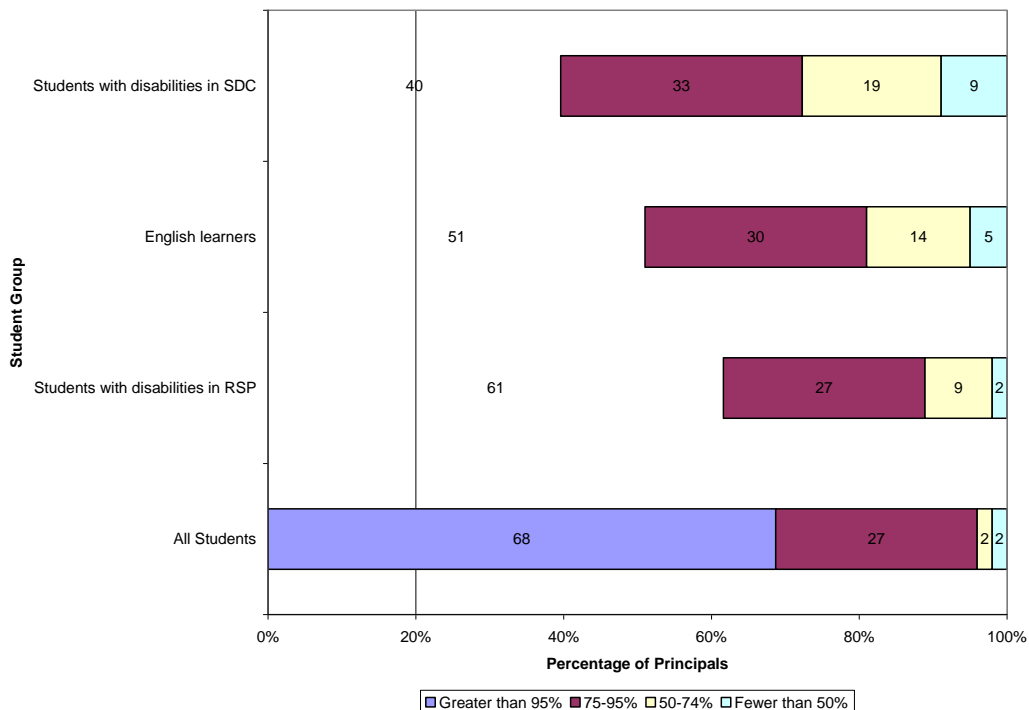


Figure 4.5b. Percentage of teachers predicting increased or strongly increased student retention and dropout rates in 2000, 2001, 2002, 2003, 2004, and 2006.

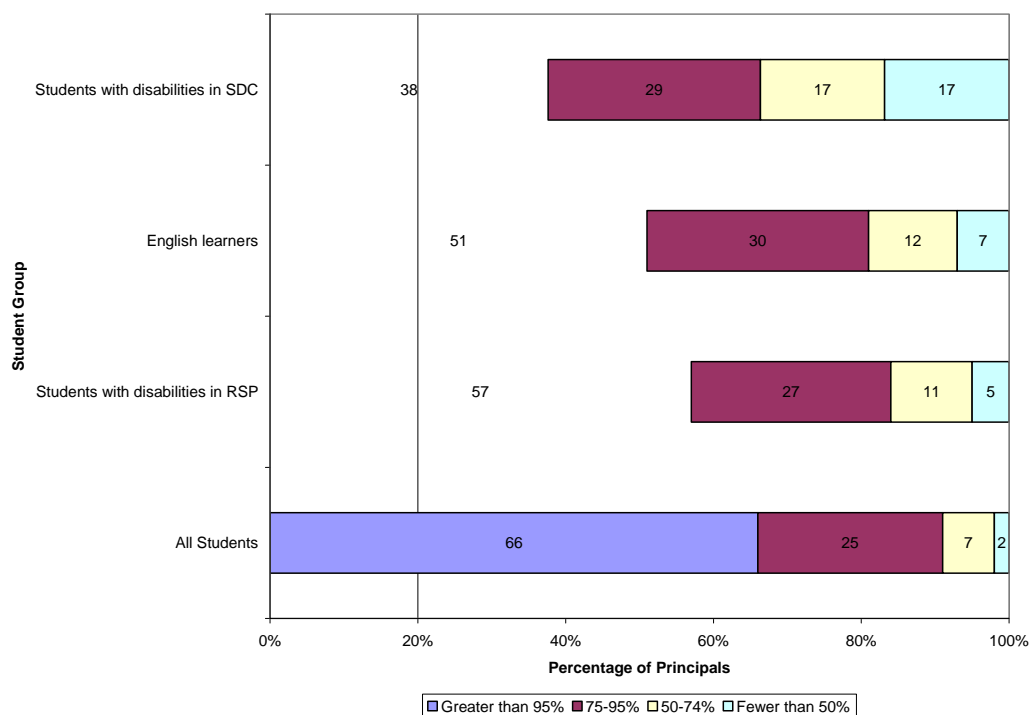
One of the concerns when implementing a new exam is whether there is a differential impact on various subgroup populations. We asked principals to estimate the percentage of 10th grade students who have had instruction in the ELA and mathematics content standards; the question was broken down to elicit responses regarding the total student population and the following specific subgroups: students with disabilities in Special Day Classes (SDC), students with disabilities in Resource Specialist Classes (RSC), and EL students (PR-28, PR-29). Figures 4.6a and 4.6b present the results for ELA and mathematics, respectively. Each student subgroup is represented by a horizontal bar containing four segments. The leftmost segment indicates the percentage of principals who estimated that greater than 95 percent of their student population within that demographic subgroup have had instruction that covers the CAHSEE content standards; the next segment represents 75–95 percent; the next, 50–74 percent; and the rightmost segment indicates fewer than 50 percent. The longer the leftmost segments, the greater the preparedness. Principals' estimates are similar for ELA and mathematics: that fewer students with disabilities and EL students are prepared than in the general student population.

Comparisons among principals' 2001, 2002, 2003, 2004, and 2006 estimates of instruction received, by student groups, are presented in Table 4.27. Ratings of preparedness of each student segment (EL, students with disabilities in SDC, students with disabilities in RSP, and all students) were higher in 2006 than in previous years.



Note. Bar totals may not equal 100 percent due to rounding

Figure 4.6a. Percentage of principals estimating the percentage of students who have had instruction in ELA content standards (ordered by least instruction).



Note. Bar totals may not equal 100 percent due to rounding.

Figure 4.6b. Percentage of principals estimating the percentage of students who have had instruction in mathematics content standards (ordered by least instruction).

The 2006 school year is the first year the CAHSEE was used as a graduation requirement. Principals were asked the reason their seniors are unlikely to graduate (PR-23). Response percentages were stated giving the following options: the CAHSEE requirement only; the CAHSEE requirement and failure to meet other requirements; failure to meet other requirements only; and total [of all seniors]. Responses are presented in Table 4.28. Principals reported a higher percentage of seniors is unlikely to graduate due to the combination of the CAHSEE requirements and failure to meet other requirements ($M=9.3$, $SD=15$) than will fail to graduate because of the CAHSEE alone. A slightly higher percentage of seniors is expected to not graduate because of failure to meet “other requirements only” ($M=7.3$, $SD=15$) than will not graduate because of the “CAHSEE requirement only” ($M=4.5$, $SD=7$). The mean reported total [of all seniors] expected to not graduate was 8.6 ($SD=17$).

Table 4.27. Principals' 2001 through 2006 Estimates of the Percentage of Students with Instruction in Content Standards (in percentages)

Student Group	2001		2002		2003		2004		2006	
	ELA	Math	ELA	Math	ELA	Math	ELA	Math	ELA	Math
English learners										
Greater than 95%	8	6	28	22	41	28	34	34	51	51
75–95%	18	29	15	22	16	22	16	19	30	30
50–74%	18	15	30	32	28	28	28	38	14	12
Fewer than 50%	56	50	28	24	16	22	22	9	5	7
Students with disabilities (in SDC for 2003, 2004, 2006 columns)										
Greater than 95%	12	5	26	14	16	9	35	30	40	38
75–95%	22	23	14	19	23	19	16	10	33	29
50–74%	24	28	24	21	10	19	26	30	19	17
Fewer than 50%	42	44	36	45	52	53	23	30	9	17
Students with disabilities in RSP										
Greater than 95%	N/A	N/A	N/A	N/A	25	14	41	34	61	57
75–95%	N/A	N/A	N/A	N/A	31	30	19	22	27	27
50–74%	N/A	N/A	N/A	N/A	22	27	34	38	9	11
Fewer than 50%	N/A	N/A	N/A	N/A	22	30	6	6	2	5
All students										
Greater than 95%	16	9	43	22	34	33	49	49	68	66
75–95%	36	43	23	30	39	35	30	36	27	25
50–74%	27	17	25	26	24	23	21	12	2	7
Fewer than 50%	21	31	9	22	3	10	0	3	2	2

Note 1. The 2003, 2004 and 2006 surveys separated students with disabilities into two sub-categories: Students with disabilities in Special Day Classes (SDC) and Students with disabilities in Resource Specialist Programs (RSP). The 2001 and 2002 surveys had only one overall category.

Note 2. Column totals by student group may not equal 100 percent due to rounding.

Table 4.28. Principals Reporting Reason Seniors in Their Schools Unlikely to Graduate (in percentages) (N=51)

Reasons	Percentage of Seniors				
	0–20%	21–40%	41–60%	61–80%	81–100%
Because of the CAHSEE requirement only	88	5	7	0	0
Because of the CAHSEE requirement AND failure to meet other requirements	70	13	15	3	0
Because of failure to meet other requirements only	84	5	8	3	0
Total [of all seniors]	87	0	7	3	3

Note 1. In cleaning the data collected for this item, nine responses were eliminated from the "total" output. Only responses that made sense in the context of that question are reported here (e.g., eliminated total response of 92 when other parts of the question were answered 10, 1 and 0, respectively; eliminated total response of 9 when other parts were answered 4, 7 and 11, respectively).

Note 2. Row totals may not equal 100 percent due to rounding.

Awareness

Over the 7 years of reporting on CAHSEE, surveys show an increased awareness of the CAHSEE among faculty/staff, students, and students' parents. The surveys also reveal an increase in knowledge of more specific CAHSEE-related information. CAHSEE-related activities in the schools, communication with parents, the cumulative distribution of information about the CAHSEE, and that 2006 is the first year the CAHSEE is a graduation requirement have all served to increase awareness.

Principals were asked to estimate how aware their students and parents were of the CAHSEE (PR-7a, PR-8a). None estimated that their students knew nothing about the exam, 16 percent estimated that their students had only general information, and a substantial proportion of respondents estimated their students had specific knowledge of the exam (i.e., 98% reported the students knew what knowledge and skills are covered; 93% indicated they knew the time of year when the exam is given; 86% of students knew which students have the opportunity to take the exam). Five percent of principals estimated that their students' parents knew nothing about the exam, 60 percent estimated their students' parents had only general information, and an additional 57–82 percent estimated that their students' parents had advanced knowledge of the exam (e.g., 57% reported that parents knew what knowledge and skills are covered, 82% indicated they knew the time of year when the exam is given, and 77% believed parents know which students have the opportunity to take the exam). In general, principals' ratings of student and parent familiarity with the CAHSEE have increased since 2004 (Table 4.29). Students and parents having only general information decreased, as their knowledge of specifics about CAHSEE has increased. In general, ratings of student and parental knowledge have risen over the course of the CAHSEE (as noted in bold in Table 4.29).

Principals were asked to estimate the percentage of students and parents in their school who know what knowledge and skills are covered by the exam (PR-7b, PR-8b). The 2006 mean estimate of student familiarity was 83 percent (SD=19) compared to the

2004 estimate of 69 percent (SD=28); the 2006 mean estimate of parent familiarity was 53 percent (SD=27) compared to the 2004 estimate of 44 percent (SD=30).

Table 4.29. Principals' Responses to Estimated Percentage of Students and Parents Familiar with the CAHSEE

Familiarity	Respondent Group	2001	2002	2003	2004	2006
They know which students have the opportunity to take the exam.	Students	49	67	81	79	86
	Parents	18	54	60	67	77
They know the time of year when the exam is given.	Students	38	67	71	85	93
	Parents	38	63	57	79	82
They know what knowledge and skills are covered by the exam.	Students	33	51	79	79	98
	Parents	18	17	26	44	57
Have general information only	Students	67	60	33	26	16
	Parents	78	89	62	65	60
No familiarity	Students	2	4	10	3	0
	Parents	7	4	12	3	5

Note 1. Respondents could select multiple responses, thus the columns total more than 100 percent.

Note 2. Discernable changes in familiarity are noted in bold.

Other

The principal and teacher surveys also asked respondents general questions about their school's student population, the support structures for the ELA and mathematics teachers (e.g., faculty, teachers of other subjects), and the usefulness of CAHSEE score reports. The survey also included a concluding open-ended comments section for the respondent to describe specific benefits and challenges of the CAHSEE, or add more detail on any of the proceeding questions.

Principals were asked to rate the likelihood that specific factors would affect their students' success in meeting the requirements of the CAHSEE (PR-30). The results are presented in Table 4.30, in decreasing order of endorsement in 2006. The factors for which most principals indicated "definitely a factor" were nearly identical to those in 2004 with language barriers and poor attendance switching places, followed by lack of motivation. However, ratings of the impact decreased in all of these categories except language barriers, which remained fairly stable at 58 percent and 61 percent, respectively. Three principals (6%) reported other impacts on students' success in meeting CAHSEE requirements such as having quality teachers for English learner, having to wait too long for test results. Most notably, substantially fewer principals cited lack of motivation and lack of preparation needed to pass as definite factors, relative to 2004.

Table 4.30. Percentage of Principals Indicating Factors Affecting Student Success on the CAHSEE

Factor	2001	2002	Definitely a Factor		2006
			2003	2004	
Language barriers	39	50	62	58	61
Poor attendance	67	61	68	62	55
Lack of motivation	47	43	57	59	43
Lack of preparation needed to pass	48	42	54	41	18
Too many tests to prepare for	53	48	47	23	16
Lack of credentialed math teachers	N/A	N/A	5	6	2
Lack of credentialed ELA teachers	N/A	N/A	0	0	0
District's current level of standards in math or algebra	14	25	14	N/A	N/A
District's current level of standards in English or writing	14	20	11	N/A	N/A
Other	N/A	N/A	N/A	N/A	40

Note. Respondents could select multiple responses, thus the columns total more than 100 percent.

Additionally, principals ranked the factors they felt had the greatest impact on their students' success in meeting the requirements of the CAHSEE (i.e., 1, 2, or 3) (PR-30). The factor selected most was language barriers, by 17 respondents (33%). Lack of motivation and poor attendance were each selected by 12 respondents (24%).

One common criticism of other testing programs that test students on a small number of content areas is that the teachers in those areas are perceived as solely responsible for preparing students, as opposed to a school-wide emphasis on student success. To assess whether this concern was valid for the CAHSEE, principals and teachers were asked to what degree teachers other than those in ELA and math view themselves as sharing responsibility for student success on the CAHSEE (PR-21, T-20). Table 4.31 indicates principals' perceptions that other teachers felt "very responsible" has decreased slightly, but that the combination of "very responsible" and "somewhat responsible" has increased since 2004. Teacher ratings on the level of perceived shared responsibility increased markedly in 2006.

Table 4.31. Responsibility Felt by Teachers Other Than ELA and Math (percentages as perceived by principals and ELA and math teachers)

Level of Perceived Responsibility	Principals				Teachers			
	2002	2003	2004	2006	2002	2003	2004	2006
Very responsible	11	22	41	23	10	16	10	46
Somewhat responsible	70	49	35	58	32	28	29	35
Slightly responsible	13	27	18	19	41	36	39	0
Not at all responsible	6	3	6	0	16	20	22	19

Note. Column totals may not equal 100 percent due to rounding.

Principals indicated what they thought was most helpful about the CAHSEE individual and group score reports (PR-13). (This question was open-ended in the 2004 survey.) In 2006, 32 percent reported usefulness for instruction was most helpful; 30 percent, ease of understanding; 18 percent, timeliness; 9 percent, comprehensiveness; and 2 percent other. Nine percent of principals said they had not seen a score report. One principal (2%) reported that the most helpful thing about CAHSEE was that it reported scores.

Principals and teachers were all asked a final open-ended survey question. That is, to describe any specific benefits and challenges for their school and students associated with successfully meeting the requirements of the CAHSEE. All two hundred two teachers responded to this question. Fourteen out of 51 (27%) principals responded to this item. Of the principals, five (10%) reported the following challenges: (a) problems with their testing logistics and resources (e.g., lacking a proper testing environment, needing more space) (b) poor attendance by the students, (c) changing demographics reflecting a higher number of students from ethnic minorities and lower economic households, and (d) impact on school (e.g., total school instructional minutes due to the CAHSEE testing, “testing of students during the regular school day without modifying schedules for those students who have passed the CAHSEE”). Four principals (8%) indicated challenges for special education and English learner students and their teachers (e.g., school EL population does not warrant increased sections to support these students, some special education students will not be able to pass even with intervention). Two principals (4%) reported that their schools were (a) alternative or (b) continuation schools. Three (6%) principals made it a point to provide positive comments or benefits such as (a) “the CAHSEE presents a minimum standard of worth for a diploma,” (b) sophomores took the CAHSEE seriously this year because it was a graduation requirement, and (c) well prepared students and excellent teachers.

Many teachers stated that the test has positive benefits. Nine percent (18 of 202) of the teachers stated that their school is now offering CAHSEE preparation classes and tutorial sessions. Eight percent (16 out of 202) said that the test motivates the students to do well and take their education seriously. Eight teachers (4%) believe that the CAHSEE provides useful data and gives meaning to a high school diploma. Passing the exam gives students a sense of achievement. The test reinforces the state’s standards, and preparing for the test helps students with their writing and math skills.

However, quite a number of teachers expressed a belief that the exam has negative effects. Twenty-five teachers (12%) believe that due to the exam requirement and its high stakes, teachers are only teaching test-taking skills and how to pass standardized tests. Some teachers (2%) also stated that students are bombarded with tests throughout the year; therefore the state should create a method to streamline testing. Four percent (8 out of 202) of teachers stated that a major challenge is that students are entering high school with various mathematical levels (e.g., students lack the fundamental math skills to be successful on the exam). One teacher suggested that students should be allowed to use calculators, since they customarily use them in class and on other standardized tests. Another challenge is preparing English learners and

special education students for the exam. Thirteen percent (26 out of 202) of teachers expressed concern about these second language students, and seven percent (14 out of 202) are worried about Special Education students. Teachers have observed students who did not pass the test become discouraged and display a lack of motivation. A few teachers (2%) stated that they received little to no help from their districts and/or school administrations regarding test preparation. Eight (4%) teachers stated that they have limited testing resources, citing such issues as lack of testing space, limited study material, and inadequate funding for preparatory programs and teachers. Finally, five (3%) teachers stated that students with behavioral problems challenged their school's success on the exam. Some schools have problems with juvenile delinquency and truancy. Fifteen teachers (7%) stated the following challenges: (a) students coming to school unmotivated, (b) high poverty, and (c) lack of parental involvement.

Summary

Principals and teachers relayed an overall positive account of the California High School Exit Examination program in this seventh year since its inception. A longitudinal sample of high school personnel was surveyed each spring from 2000 through 2006 (except 2005) to elicit data on (a) background, (b) effect of the CAHSEE, (c) use of the CAHSEE results, (d) content standards, (e) expectations, (f) awareness, and (g) other topics. Surveys in the early years relied heavily upon anticipation and expectations but as schools gained experience with the CAHSEE the focus turned toward actual effects and action. After the California State Board of Education postponed implementation of the CAHSEE consequences from the Class of 2004 to the Class of 2006, we made adjustments to survey items (and interpretation of the responses). Responses this year, in which the CAHSEE first affected high school seniors' graduation status, indicated progress has been made in many aspects in preparing school staff and students to pass the CAHSEE but some concerns about the assessment linger.

Teachers' reported backgrounds were similar in 2006 and 2004. A small percentage reported having only a bachelor's degree. However, the percentage of teachers certified in their primary subject area dropped. Years of teaching experience also decreased over the same time period for teachers responding to the survey. This reduction in years of teaching experience could be linked to 45 percent of principals reporting an increased number of teachers on staff over the past three years. Taken together, these data may indicate an influx of new teachers being placed in classrooms teaching subjects for which they are not certified. However, this sample of California teachers may not be wholly representative of the state in this regard. ELA teachers appeared to be more specialized in grade-level teaching than were math teachers (Table 4.5).

Schools offer various specialty education programs aimed at addressing student body strengths and weaknesses (Table 4.2). A majority of principals indicated that their schools offered special education, programs for English learners, remedial courses, Advanced Placement, and targeted tutoring. For change to occur, not only must schools

offer such programs, but also, students must take advantage of them. The estimated percentage of students participating in these programs increased from 2004 data for all programs.

Reported methods of instruction in the classroom are quite similar to those in 2004; all of the activities then rated as the most utilized were still top-rated in 2006. Overall, classroom activities most often involve working from textbooks and supplemental materials, applying subject area knowledge to real-world situations, writing a few sentences, working in pairs or small groups, and taking quizzes or tests.

Principals and teachers reported an increase in the amount of time CAHSEE activities require. Principals' 2006 estimates of the time spent on the CAHSEE activities increased markedly from 2004 data. Whereas only 15 percent indicated they spent more than 35 hours in activities related to the CAHSEE in 2004, 59 percent made that claim in 2006. Teachers reported their time in three ways, with 2006 estimates increasing for each (Table 4.7). However, even with these increased estimates, teachers spend substantially more time in subject-area training (i.e., ELA, math) than in CAHSEE activities (Table 4.8).

Some teachers have the opportunity to participate in professional development activities from local and/or state sources. Overall, the quality of opportunities provided through local sources was rated more highly than those provided through state sources (Table 4.9). Teachers' rating of the benefit garnered from professional development (wherever received) increased substantially in 2006 from 2004 (Table 4.10). Presumably, professional development that results in more instructional benefit will also benefit the students' learning and success. Both ELA and math teachers reported that resources offered for the CAHSEE were useful overall (Table 4.11).

The majority of teachers who are aware of the CDE Web site and the CAHSEE Teacher Guide find them useful overall. However, as these were designed to be resources for teachers and schools in preparing students to succeed on the CAHSEE, all teachers should be familiar with and utilize them. Both principals and teachers responded that the CAHSEE had a positive influence on schools' instructional practices. Further integration of CAHSEE-related materials and school curriculum and instruction should benefit all involved.

Many activities take place in the schools to ready students for the CAHSEE. In general, there has been an increase in these preparatory activities over the years. In some cases, there was a marked increase in activities since 2004. Principals report that programmatic measures with the greatest increases are: *(a) providing individual/group tutoring, (b) having students work with computers, (c) using school test results to design remedial instruction, and (d) offering summer school courses*. More than 95 percent of principals reported they used at least one of these activities: providing individual/group tutoring, encouraging students to work hard and prepare, emphasizing the importance of the CAHSEE. Teachers also indicated an increase in individual/group tutoring, in addition to inclusion of non-ELA and non-math teachers in instructional planning for the

CAHSEE, and using class test results to change instruction. More than 85 percent of teachers reported they used at least one of these activities: talking with my students, encouraging students to work hard and prepare, and emphasizing the importance of the CAHSEE (Figures 4.1a and 4.1b).

More funding or reallocation of funds may be necessary to continue implementation of activities to promote learning for all students. Financial constraints limit the ability of schools to provide services, and the data suggest this issue will be more pronounced in the near future. More than 30 percent of principals reported that providing (a) *individual support assistance* and (b) *teacher and school support services* would be constrained to at least a moderate extent (Table 4.14). Financial constraints and/or other factors could be why principals indicated fewer actions to promote student learning were fully implemented in 2006 than in previous years (Table 4.15). However, the perceived directing of school resources from other areas to facilitate students' success on the CAHSEE decreased considerably in 2006 (Table 4.16). Vocational courses and courses in the arts were affected to the greatest extent.

Principals responded to a question about future plans to deal with the CAHSEE (Table 4.17, Figure 4.2). More than 50 percent reported the following four activities as currently "fully implemented": *adopted California content standards*; *provided individual/group tutoring*; *ensured we are offering demanding courses from the beginning*; and *ensured that students are taking demanding courses from the beginning*.

Students with disabilities must also pass the CAHSEE. Principals indicated they implemented various plans and strategies to address the specific needs of this community. More than 95 percent of schools followed the IEP/504 plan. More than 75 percent of schools utilize the following three activities: (a) *provided accommodations and/or additional assistance to students with disabilities*, (b) *mainstreamed students with disabilities*, and (c) *modified IEP or 504 plan*. English learners are also required to pass the CAHSEE. Principals reported more than 75 percent of schools utilize the following three activities: (a) *encouraged staff development in EL education*, (b) *mainstreamed EL students*, and (c) *provided accommodations and/or additional assistance*. Principals estimated that fewer students with disabilities and EL students are prepared for the CAHSEE requirements than among the general student population (Figures 4.6a and 4.6b). However, ratings of preparedness for students with disabilities and EL students are higher in 2006 than in previous years (Table 4.27).

Principals and teachers were optimistic about the impact of the CAHSEE on student retention and dropout rates. Overall, principals and teachers predicted the CAHSEE would result in fewer students being retained in grade than in past years. Both groups also predicted the CAHSEE would have a positive effect (decrease in numbers) on the student dropout rate. Early concerns by principals and teachers that the dropout rate would increase as a result of the CAHSEE requirement dropped markedly over the past few years (Table 4.26, Figures 4.5a and 4.5b).

The alignment of school curricula and state content standards is an important aspect of a successful statewide program such as the CAHSEE. Principals reported an increase in plans to ensure all high school students receive instruction in each of the content standards. However, they also indicated slight decreases in the following steps to prepare for alignment with California content standards: *(a) districts/schools encourage the use of content standards to organize instruction* and *(b) textbooks align well with ELA/math content standards*. While principals reported that these two efforts toward alignment decreased, the reported percentages remained high (80 percent and 71 percent, respectively, Table 4.18). Overall alignment between district standards and the state content standards is quite high as reported by principals, with a majority of districts reporting they adopted the state standards (Table 4.19). Teachers generally agree with the principals, with the majority of teachers indicating almost all of the standards tested by the CAHSEE are covered by their school's curriculum (Tables 4.20a and 4.20b).

An increasing percentage of principals over the years reported that teachers understand the difference between “teaching to the test” and “aligning curriculum and instruction to the standards.” In addition to this understanding, it is important to determine if teachers have and/or use the standards. Principals said a large majority of teachers have the CAHSEE blueprints, but many fewer teachers use the blueprints for instructional planning (Table 4.21). More than 90 percent of principals reported using the following two methods to determine whether teachers are, in fact, “teaching to the standards”: *(a) classroom visits; walk-throughs or other informal interactions* and *(b) discussions at faculty meetings* (Table 4.22).

California Standards Test (CST) results are utilized most often to identify students who are at risk of not passing the CAHSEE or scoring Below Basic (or Far Below Basic) on the CST. More than 50 percent reported using two other methods: *(a) district assessments* and *(b) teacher judgment*.

Teachers' rating of 10th grade students' preparedness to pass the CAHSEE has showed a steady increase through the years, with nearly 50 percent deemed “very well prepared” or “well prepared” (Table 4.23). The CAHSEE's impact on student motivation and parental involvement increased or remained steady in 2006 (Tables 4.24 and 4.25, Figures 4.4a and 4.4b). Principals predicted that students who do not pass would be more motivated than students who do pass. Principals' prediction of the graduation rate increased slightly, from 79 percent in 2004 data to 83 percent in 2006.

Principals and teachers expect student motivation and parental involvement to be positively impacted by the CAHSEE. These expectations have increased considerably from the 2001 data, which may have reflected an uneasiness or uncertainty about the CAHSEE on the part of faculty/staff. Additionally, early predictions that the CAHSEE would increase dropout rates and lower student retention rates were unfounded. Principals and teachers increasingly believe the CAHSEE will have no effect on these measures; however, principals are more optimistic than teachers. These data reflect an

encouraging trend that the more the surveyed principals and teachers experience the CAHSEE assessment, the more benefit they see in it.

Principals also estimated the differential impact of the CAHSEE on various subgroup populations. They indicated that fewer students with disabilities and EL students are adequately prepared than in the general population. On a positive note, all students are deemed more prepared in 2006 than previous years. Additionally, the CAHSEE is not viewed as the single culprit keeping seniors from graduating. Principals reported the overwhelming majority of seniors who do not graduate would fail to meet not only the CAHSEE requirements but also other requirements as well.

Principals estimated students' and parents' awareness of the CAHSEE. As may be expected, ratings of student and parental knowledge about specifics of the CAHSEE have increased over the years (Table 4.29). Similarly, they estimate that fewer students and parents have only general knowledge of the CAHSEE. Current year mean estimates of students' and parents' familiarity of what knowledge and skills are covered by the exam increased from 2004 responses. Principals estimated that almost all students know what knowledge and skills are covered by the exam (98%).

As students are increasing their preparedness, so are school faculty/staff. Principals reported increasing all activities listed in the survey that addressed preparation of faculty/staff for the CAHSEE administration. Two activities were utilized by at least 75 percent of schools: *(a) provided test-taking strategies and (b) participated in test administration workshops.*

Both principals and teachers indicated a belief that teachers other than those who provide instruction in ELA and math feel an increased level of responsibility for student success on the CAHSEE (Table 4.31). The majority of principals indicated other teachers felt "somewhat responsible" while teachers were more optimistic, reporting other teachers felt "very responsible."

Principals considered reasons their seniors are unlikely to graduate this year, the first year the CAHSEE is in effect (Table 4.28). Most principals said that the CAHSEE requirements in addition to other graduation requirements would affect graduation rates. The top factor most principals reported as having the greatest impact on student success was language barriers. The second was poor attendance. Principals reported the following two factors affecting student success on the CAHSEE had decreased as a "definite factor" from 2004 data: *(a) lack of motivation and (b) lack of preparation* (Table 4.30).

Overall, the seven years of the CAHSEE school surveys show principals, teachers, and students are adapting to the requirements. Activities to prepare students for the CAHSEE, student participation in specialty programs, student and parental knowledge about specifics of the CAHSEE, teacher benefit from professional development activities, the estimate of 10th grade students' preparedness to pass the CAHSEE, and the estimated graduation rate are on the rise.

Chapter 5: Trends in Educational Achievement and Persistence During the CAHSEE Era

Introduction

A high-stakes test such as the CAHSEE can have profound effects on the education system as a whole. Among the goals of a standardized graduation examination is to raise the bar for what young adults who hold a high school diploma know and can do; one of the dangers is that it may discourage struggling students. Since its inception, the CAHSEE has provoked predictions ranging from a surge in dropout rates to improved preparation for college.

Other chapters in this report address actual CAHSEE results as well as the impressions of principals, teachers, and students over time with respect to the CAHSEE. This chapter investigates other data sources to determine trends that may be related to the CAHSEE. Specifically, we look at students who leave high school prematurely from a number of perspectives, including official CDE dropout rates, enrollment trends, and high school diploma alternatives: the General Education Development (GED) and the California High School Proficiency Examination (CHSPE) certificates. We also explore officially reported graduation rates, evidence of shifts in college preparation, and evidence of shifts in participation—and success—in Advanced Placement (AP) courses.

Students Who Leave High School Prematurely

An early and persistent concern regarding the implementation of the CASHEE requirement was the fear that struggling students would become frustrated and dropout rates would increase. This phenomenon is difficult to measure, however, because the definition of what a “dropout” is and the requisite data underpinnings to clearly identify dropouts are controversial and in flux. This problem is not at all unique to California; it has been the subject of debates among researchers both in academia and in the public throughout the nation. The National Center for Education Statistics published new guidelines in 2003 to encourage a standard dropout calculation method, but this definition is itself controversial and the debate continues.

Because the definition of dropouts is so controversial, we provide several views here of trends in student persistence through grade 12. We first present the State of California’s definitions of dropouts and associated official dropout statistics. We then look at enrollment trends for grades 8 through 12 for various student cohorts. We then investigate trends in GED test-taking over time, which is an alternative to a high school diploma. And finally, we discuss the California High School Proficiency Examination (CHSPE), another diploma alternative.

Dropout Rates

The California Department of Education (CDE) reports dropout rates publicly on its Web site. California revised its dropout calculation in 2003 to better align with rates

reported by the National Center for Education Statistics (NCES). We will look first at CDE-reported single-year dropout rates and then at cumulative four-year dropout rates as reported by CDE.

What is a Dropout?

The CDE definition of a dropout was modified in October 2003 to conform to guidelines issued by NCES. The original definition is provided in Figure 5.1 and the revised definition is provided in Figure 5.2 (Retrieved on 07/21/05 from http://data1.cde.ca.gov/dataquest/gls_drpcriteria.asp).

Dropout Criteria

For years prior to 2002-03 the California Department of Education defined a high school dropout as a person who met the following criteria:

- was formerly enrolled in grades 7, 8, 9, 10, 11, or 12
- has left school for 45 consecutive school days and has not enrolled in another public or private educational institution or school program
- has not re-enrolled in the school
- has not received a high school diploma or its equivalent
- was under twenty-one years of age
- was formerly enrolled in a school or program leading to a high school diploma or its equivalent

This includes students who have moved out of the district, out of state, or out of the United States and are not known to be in an educational program leading toward a high school diploma or its equivalent.

Districts are also responsible for determining the status of their "no-show" students. "No-shows" are students who completed a grade, but did not begin attending the next grade the following year.

Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>)

Figure 5.1. CDE explanation of dropout definition prior to October 2003.

What criteria are used to define a dropout?

In October, 2003, the California Department of Education (CDE) adopted the National Center for Educational Statistics (NCES) Dropout definition. Following the new guidelines, the CDE now defines a dropout as a person who:

1. Was enrolled in grades 7, 8, 9, 10, 11 or 12 at some time during the previous school year **AND** left school prior to completing the school year **AND** has not returned to school as of Information Day.

OR

2. Did not begin attending the next grade (7, 8, 9, 10, 11 or 12) in the school to which they were assigned or in which they had pre-registered or were expected to attend by Information Day.

Exclusionary Conditions

For each student identified in the criteria above, the student is **not a dropout** if:

The student has re-enrolled and is attending school.

The student has graduated from high school, received a General Education Development (GED) or California High School Proficiency Examination (CHSPE) certificate.

The student has transferred to and is attending another public or private educational institution leading toward a high school diploma or its equivalent. (Does not include adult education programs unless the district can verify that these students are still enrolled in a GED or high school completion program on Information Day.)

The student has transferred to and is attending a college offering a baccalaureate or associate's program.

The student has moved out of the United States.

The student has a temporary school recognized absence due to suspension or illness.

The school has verified that the student is planning to enroll late (e.g., extended family vacation, seasonal work.)

The student has died.

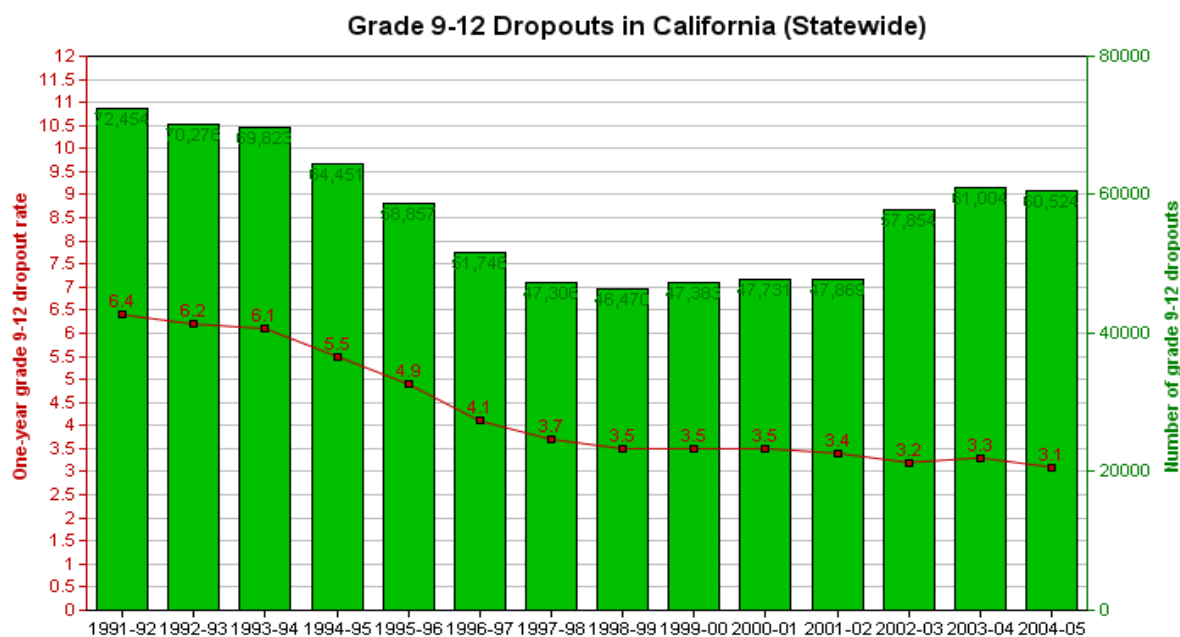
Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>)

Figure 5.2. CDE explanation of dropout definition as of October 2003.

The revised definition provides more specific guidance regarding students who are not considered dropouts. For example, students who have received a GED or CHSPE certificate in lieu of a diploma are explicitly excluded from the dropout calculation.

CDE Single-Year Dropout Rate

CDE routinely publishes two different dropout rates. The single-year dropout rate measures the percentage of students enrolled in grades 9–12 who are identified as dropouts in a single school year. The official CDE dropout counts for single-year dropouts are displayed in Figure 5.3. The figure is reproduced here from the CDE Web site. The single-year dropout calculation derives the total number of dropout students from grades 9–12 as a percentage of the total grade 9–12 enrollment in a single school year. The bars in Figure 5.6 indicate the number of students who dropped out and the line graph indicates the dropout rate. According to the state's public Web site information, dropout rates have increased each school year from a low in 2001–2002. The reader is reminded that the definition of dropouts changed in 2002–2003, so direct comparison across that time boundary is tenuous. However, the last two school years depicted in the chart both used the same metric, reflecting an increase of 0.1 percentage points in the single-year dropout rate, from 3.2 percent to 3.3 percent. As of the writing of this report, statistics for school year 2005–2006 were not yet available.



Source: <http://data1.cde.ca.gov/dataquest/DropStateGraph.asp?Level=State> on

Note. In 2002–03 the California Department of Education started using the National Center for Education Statistics (NCES) dropout criteria. 1 Year Grade 9–12 Dropout Rate Formula: (Gr. 9–12 Dropouts/Gr. 9–12 Enrollment)*100. Since the last published copy of this report, information from 2001 to 2004 has been updated.

Figure 5.3. Single-year dropout rates according to CDE.

CDE Cumulative Four-Year Dropout Rate and Graduation Rate

CDE also routinely produces a cumulative four-year dropout rate, which is another common dropout metric. This calculation accounts for students within a class cohort who drop out, over time, at the 9th, 10th, 11th, or 12th grade level. This rate more closely reflects what the public perceives as the meaning of dropping out of high school. Due to its cumulative effect, four-year dropout rates are generally markedly higher than single-year dropout rates.

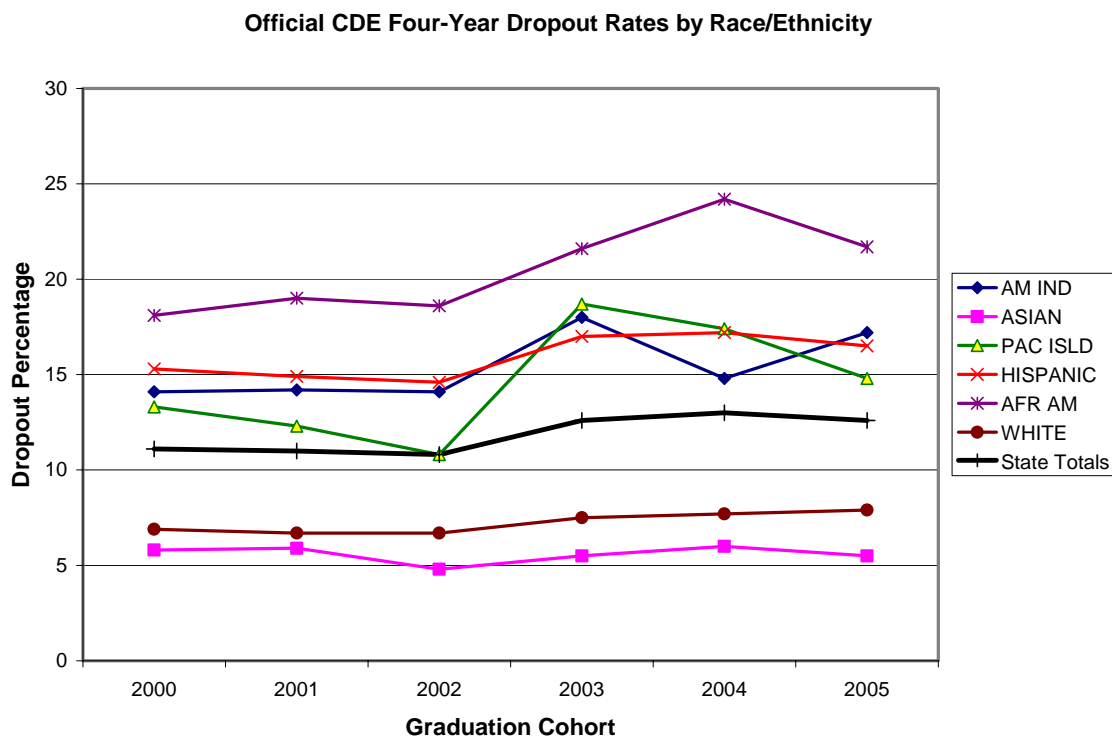
Table 5.1 contains CDE's published four-year dropout rates, disaggregated by race/ethnicity. The dropout rate is calculated as the number of students in a cohort class who dropped out in grade 9, 10, 11, or 12, as a percentage of the 9th grade entering school population. The same information is presented graphically in Figure 5.4. In order to clearly distinguish patterns, the scale on this graph has been trimmed to a range of 0–30 percent. The years on the abscissa represent the cohort's graduation year, and the dropout rate is a four-year rate for that cohort.

Table 5.1. CDE Four-Year Dropout Rates by Race/Ethnicity

Race/Ethnicity	Graduation Cohort					
	2000	2001	2002	2003	2004	2005
American Indian	14.1	14.2	14.1	18.0	14.8	17.2
Asian American	5.8	5.9	4.8	5.5	6.0	5.5
Pacific Islander	13.3	12.3	10.8	18.7	17.4	14.8
Hispanic	15.3	14.9	14.6	17.0	17.2	16.5
African American	18.1	19.0	18.6	21.6	24.2	21.7
White	6.9	6.7	6.7	7.5	7.7	7.9
State Totals	11.1	11.0	10.8	12.6	13.0	12.6

In Figure 5.4, the “State Totals” line (indicated by “+”) represents the four-year dropout rates for the student population as a whole. This rate was relatively stable from 2000 through 2002 at about 11 percent, then rose (concurrent with the definitional change) in 2003 to a level that plateaued between 12.6 and 13 percent.

This graph reveals that dropout rates among African American, Hispanic, American Indian, and Pacific Islander students consistently outpaced the dropout rates among White and Asian students. The trends within demographic groups over time are informative. For example, dropout rates among African American students stayed relatively stable at about 18–19 percent among members of the graduation cohorts 2000 through 2002, but then increased for the Class of 2003 and again in 2004 (to a peak of 24.2 percent). The dropout rate among African American students in the Class of 2005 dropped back to approximately the 2003 level. Among Hispanic students, the dropout rate was fairly stable at about 15 percent among classes graduation 2000 through 2002, then rose to 17 percent in 2003 and remained nearly that through 2005. The reader is cautioned that the apparent volatility for the American Indian and Pacific Islander groups is partly due to relatively small sample sizes; however, both of these demographic groups had peak dropout rates in 2003.



Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>)

Figure 5.4. Four-year dropout rates by race/ethnicity.

Enrollment Trends

The current definition of a dropout relies upon each school or district accurately determining the status of absent students. For example, students who move out of the country or earn a GED certificate are not considered dropouts while students enrolled in non-GED adult education schools are considered dropouts. Given the inherent difficulties in schools or districts determining the accurate status of students who are expected, but neglect to appear in a given school year, as well as the ongoing debate regarding the appropriate calculation of dropouts, we offer another look at the dropout phenomenon: enrollment trends.

Enrollment counts are documented at the schoolhouse level in the fall of each school year. CDE maintains statewide aggregations of these figures. By tracking enrollment figures by cohort, over time, we could note sizable shifts that could serve as an independent indicator of trends in retention or dropout rates. We cannot track individual students; however overall enrollment figures provide an indication of the extent to which students in each grade do not proceed to the next grade with the rest of their classmates.

Before describing the California enrollment trends, consider the following two typical enrollment patterns. One persistent enrollment pattern, within and outside California, is a 9th grade “bubble.” That is, in any given year more students are enrolled in the 9th grade than in either adjoining grade. Common explanations are that some first-time 9th graders fail to earn sufficient credits to achieve 10th grade status on time. Therefore in the fall of each year the 9th grade population comprises the prior year’s 8th grade graduates, and is inflated by the inclusion of some number of students who would have been 10th graders, if they were on pace with their classmates. At the same time, the 10th grade enrollment is suppressed by exclusion of those same students. A second persistent enrollment pattern is a decrease in enrollment each year after the 9th grade. This is generally considered to include high school dropouts.

In order to present enrollment trends in a manner that is comparable across years despite population growth, we have converted enrollment counts (as reported on the CDE Web site) to percentage decreases. Table 5.2 and Figure 5.5 show the decrease in enrollment from the 9th to the 10th grade for several recent years, going back far enough to precede the introduction of the CAHSEE. As noted in the 2004 evaluation report (Wise, et al., 2004) the 10th grade drop-off rate increased for the Class of 2006, primarily due to a larger than usual increase in the 9th grade enrollment. It was hypothesized that more students were being retained in 9th grade. In the 2004–2005 school year, the drop-off rate declined somewhat to 5.6 percent. However, during this past school year, the drop-off rate increased to 6.1 percent.

Table 5.2. Enrollment Declines From 9th to 10th Grade by High School Class.

School Year	High School Class	10 th Grade Enrollment	Prior Year’s 9 th Grade Enrollment	Decrease	
				Number	Percent
2005–2006	2008	515,681	549,471	33,790	6.1%
2004–2005	2007	*497,204	*526,442	*29,238	*5.6%
2003–2004	2006	*490,465	*520,281	*29,822	*5.7%
2002–2003	2005	*471,726	499,505	*27,779	5.6%
2001–2002	2004	459,588	485,910	26,322	5.4%
2000–2001	2003	455,134	482,270	27,136	5.6%
1999–2000	2002	444,064	468,162	24,098	5.2%
1998–1999	2001	433,528	458,650	25,122	5.5%
1997–1998	2000	423,865	450,820	26,955	6.0%

Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>). July 10, 2006. The “*” before a number represents a change in data from the 2005 evaluation report.

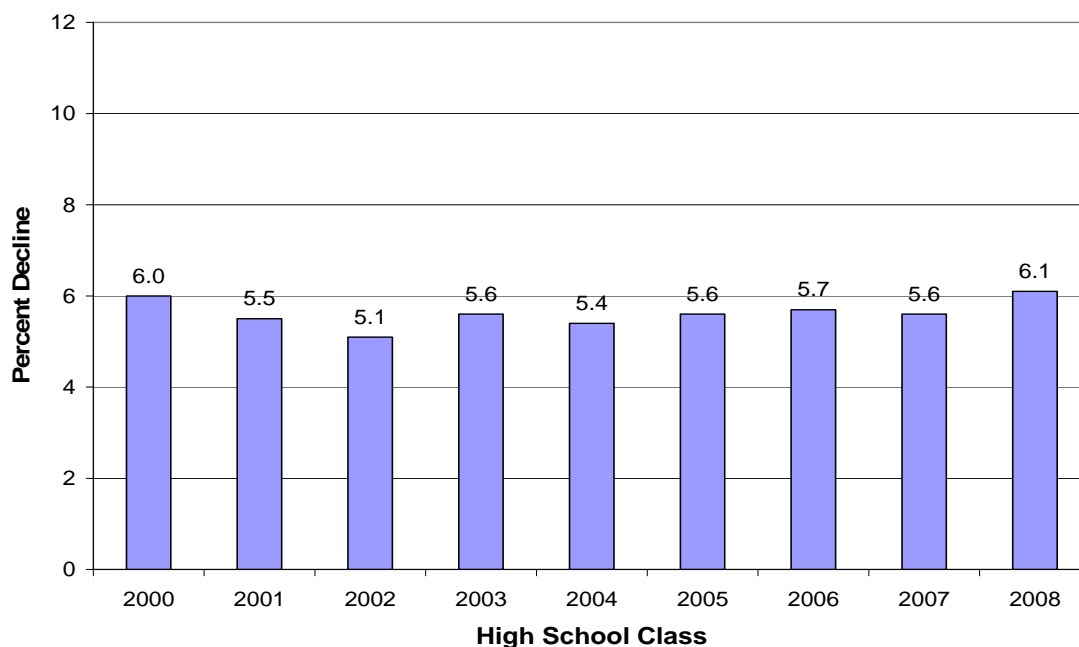


Figure 5.5. Enrollment declines from 9th to 10th grade by high school class.

Table 5.3 and Figure 5.6 show similar information for the drop-off between 10th and 11th grade enrollments. Results show that the drop-off rate between 10th and 11th grade enrollments continued the substantial decline begun with the Class of 2004. The rate declined to 6.0 percent for this past school year.

Table 5.3. Enrollment Declines From 10th Grade to 11th Grade

School Year	High School Class	11 th Grade Enrollment	Prior Year's 10 th Grade Enrollment	Decrease	
				Number	Percent
2005-2006	2007	467,241	497,204	29,963	6.0%
2004-2005	2006	*459,126	*490,465	*31,339	*6.4%
2003-2004	2005	*441,330	*471,726	*30,396	*6.4%
2002-2003	2004	*428,991	459,588	*30,597	*6.7%
2001-2002	2003	420,295	455,134	34,839	7.7%
2000-2001	2002	409,119	444,064	34,945	7.9%
1999-2000	2001	401,246	433,528	32,282	7.4%
1998-1999	2000	390,742	423,865	33,123	7.8%
1997-1998	1999	378,819	413,725	34,906	8.4%

Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>). July 10, 2006. The "*" before a number represents the change in data from the 2005 evaluation.

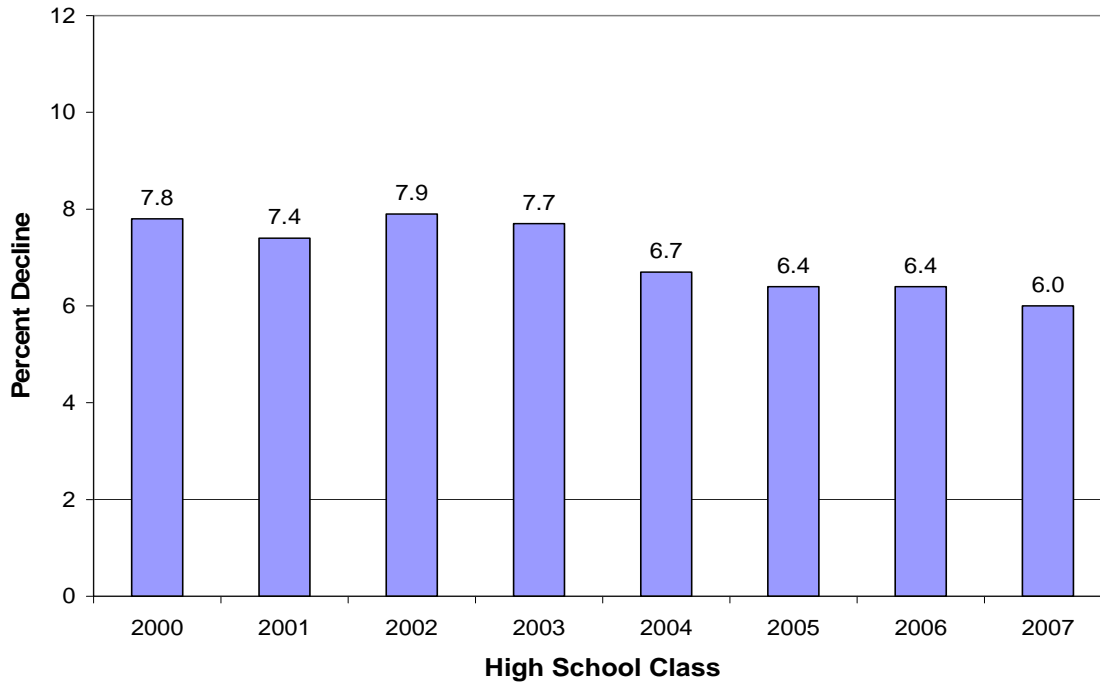


Figure 5.6. Enrollment declines from 10th to 11th grade by high school class.

Table 5.4 and Figure 5.7 show similar information for the drop-off between 11th and 12th grade enrollments. This rate decreased substantially (2.5 percentage points) with the Class of 2003. The reduced drop-off rate of the past two years has continued for the Class of 2005. For the class of 2006, there is a slight increase in the drop-off rate.

Table 5.4. Enrollment Declines From 11th Grade to 12th Grade

School Year	High School Class	12 th Grade Enrollment	Prior Year's 11 th Grade Enrollment	Decrease	
				Number	Percent
2005-2006	2006	423,241	459,126	35,885	7.8%
2004-2005	2005	*409,568	*441,330	*31,762	*7.2%
2003-2004	2004	*396,272	*428,991	*32,719	*7.6%
2002-2003	2003	*386,379	420,295	*33,916	*8.1%
2001-2002	2002	365,907	409,119	43,212	10.6%
2000-2001	2001	357,789	401,246	43,457	10.8%
1999-2000	2000	347,813	390,742	42,929	11.0%
1998-1999	1999	334,852	378,819	43,967	11.6%

Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>). July 10, 2006. The "*" before a number represents the change in data from the 2005 evaluation.

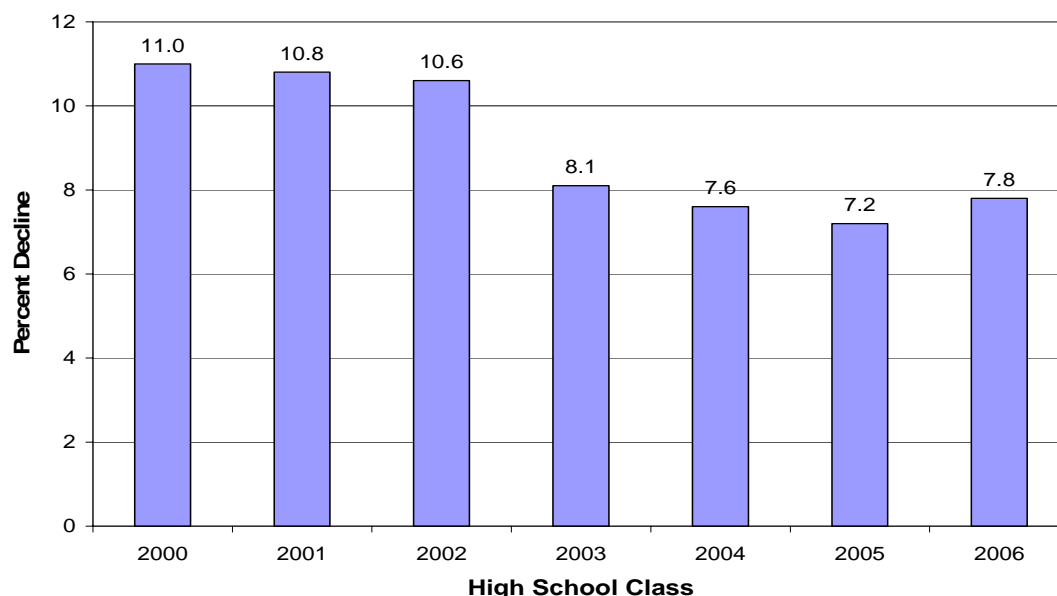


Figure 5.7. Enrollment declines from 11th to 12th grade by high school class.

GED Examinees

The new definition of dropouts, adopted in October 2003, explicitly excludes students who received a General Education Development (GED) or California High School Proficiency Examination (CHSPE) certificate. In order to determine whether the post-2002 dropout rate trends were suppressed by an exodus of students seeking alternate credentials (perhaps in reaction to the CAHSEE requirement), we investigated patterns of GED examinations.

The GED test is a nationally recognized test offered by the American Council on Education (ACE), intended to assess examinees on high school-level knowledge. The examination sections are Language Arts, Writing (Parts I and II); Social Studies; Science; Language Arts, Reading; and Mathematics, comprising approximately seven hours of testing. The ACE Web site reports that “In order to pass the GED Tests, the GED candidate must currently demonstrate a level of skill that meets or surpasses that of the top 60 percent of graduating high school seniors.”³ ACE also indicates that “About one in seven high school diplomas issued in the United States each year is based on passing the GED Tests.”⁴

³ Information from <http://www.acenet.edu/AM/Template.cfm?Section=Professionals&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=7857>, retrieved 08/31/06.

⁴ According to <http://www.acenet.edu/AM/Template.cfm?Section=Professionals&Template=/TaggedPage/TaggedPageDisplay.cfm&TPLID=58&ContentID=7788>, retrieved 08/31/06.

In California, individuals who pass the GED do not receive a high school diploma. Students must be at least 18 years old and can earn a California High School Equivalency Certificate via the GED.

Data for these analyses were provided by the California Department of Education. The initial request asked for GED data to determine the number of students taking the GED examination between 1999 and 2006, with gender, race/ethnicity, and pass/fail status. Because the GED can be taken by adults long after high school, the request was restricted to individuals under 21 years of age who were potentially influenced by the CAHSEE requirement. The resultant data file contained markedly fewer records for years 1999 and 2000 so these years were excluded from the analysis. Since individuals can take the various parts of the test separately and multiple times, the file indicated the first and last test dates. In subsequent analyses, the first test date was used. Approximately 36,000–43,000 students under the age of 21 take the GED in California for the first time each year.

Figure 5.8 depicts the number of examinees each year from 2002 through 2005, by race/ethnicity. Two trends are apparent. First, a larger number of Hispanic and White students take the GED than other racial/ethnic candidates. Second, the number of GED examinees declined in 2004 and 2005 among Hispanic, White, Asian, and American Indian students. The number of African American students taking the GED peaked slightly in 2004, by 536 more individuals than in 2003.

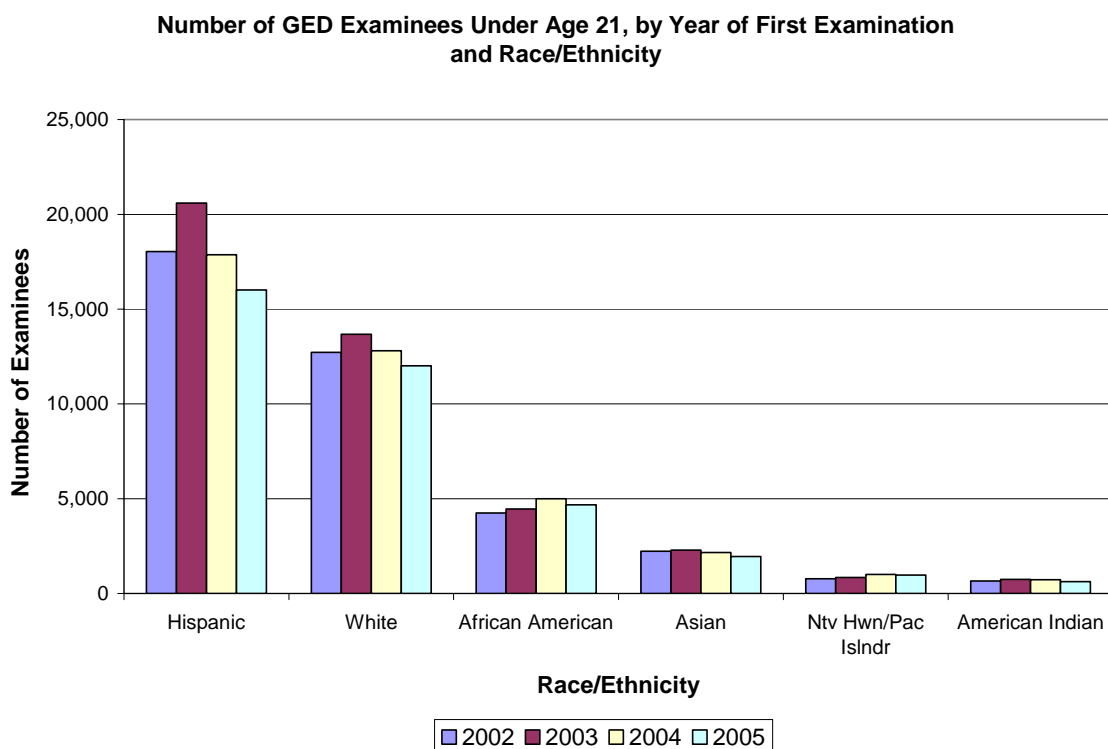


Figure 5.8. First-time GED examinees, by year and race/ethnicity.

Because 2006 data were available only through July at the time of this report, direct comparisons of the annual rate to previous years were not possible. Figure 5.9 is similar to Figure 5.8, but was constrained to include only those individuals who first tested in the January–July timeframe each year. Visual comparison of Figures 5.8 and 5.9 reveals that the trends between the two timeframes were quite similar. Assuming that testing patterns through the rest of 2006 continue to mimic previous years, it appears that the number of GED candidates in each racial/ethnic group continues to decline slightly, with the exception of American Indians, who increased in 2006 by 42 students. Thus we find no evidence to date that the CAHSEE requirement has resulted in an exodus of high school students to the GED alternative.

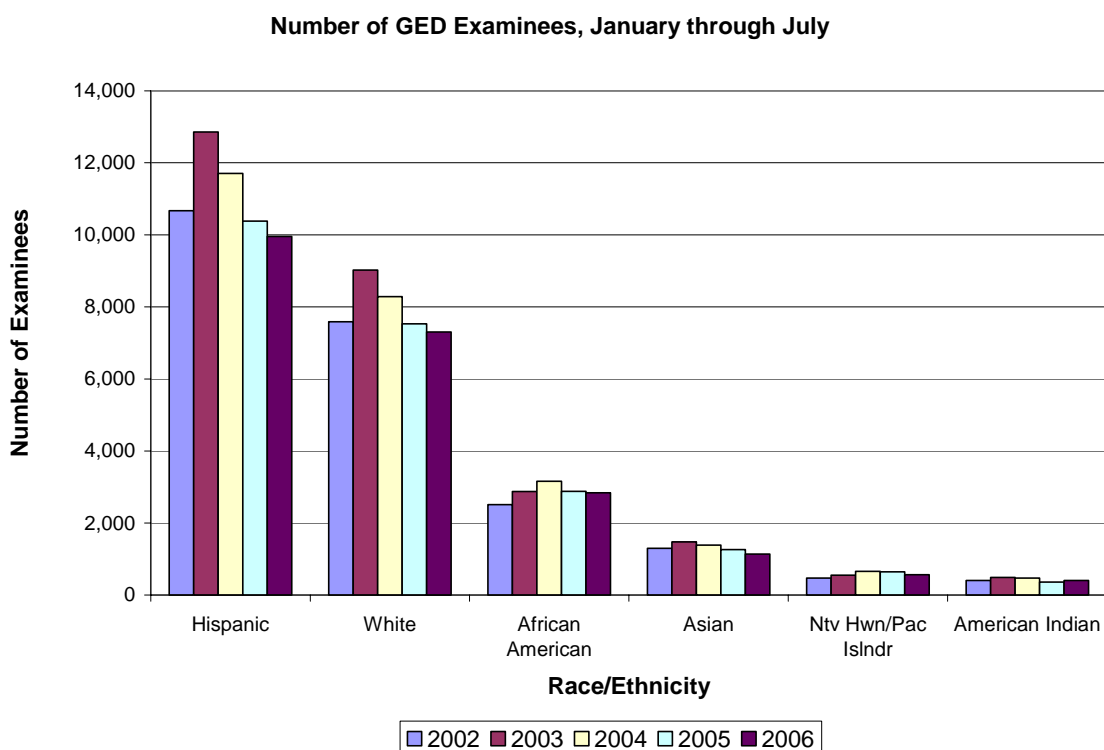


Figure 5.9. First-time GED examinees in months January through July, by year and race/ethnicity.

CHSPE Examinees

Another alternative to a traditional high school diploma is the California High School Proficiency Examination (CHSPE). The CHSPE consists of a mathematics section and an English-language arts section, both of which must be passed in order to obtain a Certificate of Proficiency awarded by the California State Board of Education. California law treats the Certificate of Proficiency as equivalent to a high school diploma. Students who earn the Certificate of Proficiency and have parental approval may leave high school early. At the time of testing, eligible candidates must be at least 16 years old, or have completed at least one academic year of the tenth grade, or be enrolled in the second semester of tenth grade. The CHSPE is administered three times

annually (once in the spring, once in the summer, and once in the fall) and is offered in English only.

The CHSPE program is considerably smaller than the GED program. The CHSPE was first administered in its current format in 2004, and 7,049 first-time examinees took the examination. In 2005, 7,313 first-time examinees took the CHSPE. Through two administrations in 2006, 5,329 first-time examinees took the CHSPE, fewer examinees than participated in the first two administrations in 2005. In total, since the summer of 2004, 8,908 students have been awarded Certificates of Proficiency (Sacramento County Office of Education: Center for Student Assessment and Program Accountability & Educational Data Systems, 2005; Sacramento County Office of Education: Center for Student Assessment and Program Accountability & Educational Data Systems, 2006). Compared to the 36,000-43,000 first-time examinees who take the GED each year, the number of students participating in the CHSPE is substantially smaller. It is important to consider, however, whether this second alternative to the traditional high school diploma is growing in popularity or attracting a changing population with the implementation of the CAHSEE requirement.

Students may retake the sections of the CHSPE multiple times across multiple administrations in an attempt to pass. During any given administration, students may attempt one or both portions of the CHSPE. For the purposes of this report, first-time examinees are of the greatest interest, as they reflect the number of students who have turned to the CHSPE as an alternative to the traditional high school diploma. Data provided by the California State Board of Education were analyzed to examine trends in CHSPE participation since its implementation in its current form in spring 2004. At the time of this report, data were available only through the summer 2006 administration. Figure 5.10 depicts the number of first-time examinees taking the CHSPE from spring 2004 through summer 2006.

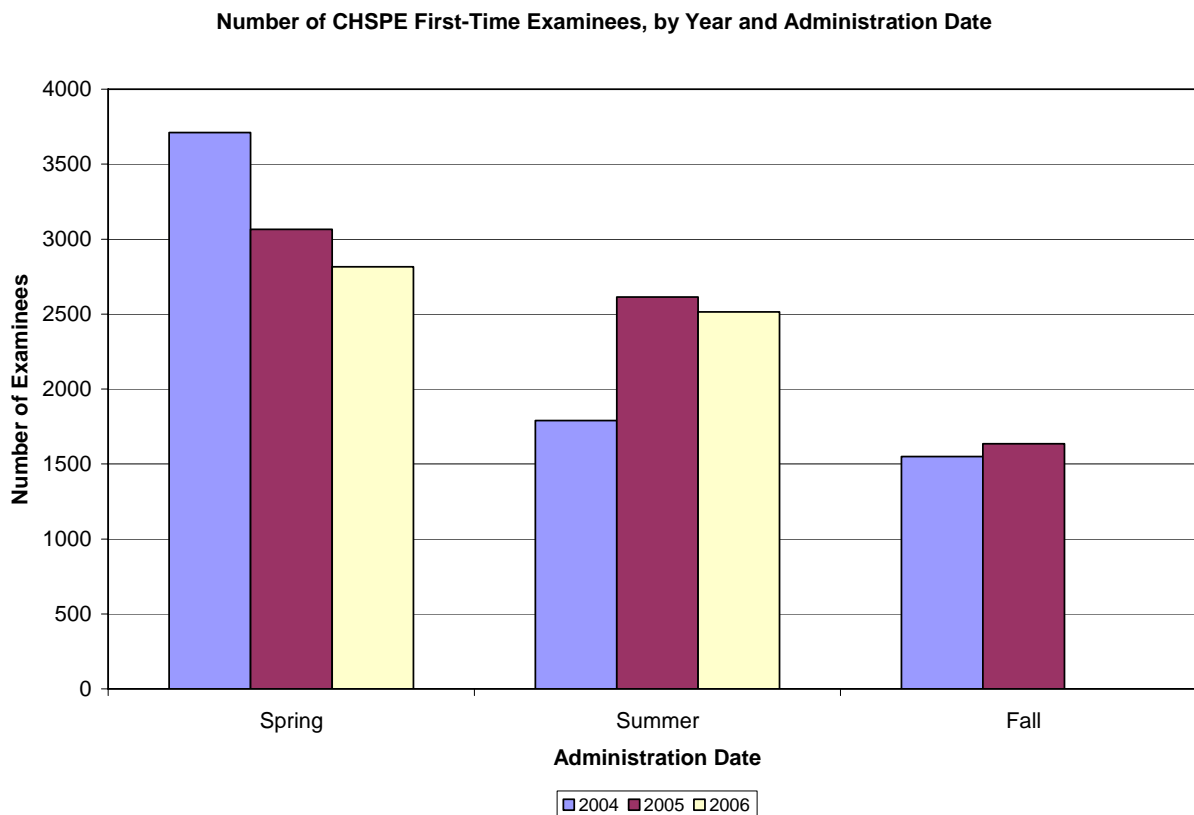


Figure 5.10. First-time CHSPE examinees across three years for the spring, summer, and fall administrations.

As Figure 5.10 illustrates, the number of students participating in the CHSPE for the first time has not increased substantially with the implementation of the CAHSEE requirement. Rather, there was an increase in participation between 2004 and 2005, with the most substantial increase occurring in the summer administration, and then a decrease in participation from 2005 to 2006. Although the data for 2006 are not complete, it appears that fewer students are taking part in the CHSPE this year than in previous years.

Examination of the demographic compilation of the population participating in the CHSPE may indicate whether specific demographic groups are turning to the CHSPE as an alternative to the traditional high school diplomas more than other groups. Examining the patterns for different racial/ethnic groups over time could reveal important educational trends. Figure 5.11 provides a picture of CHSPE participation by racial/ethnic group. Due to the limited availability of data at the time of this report, this figure depicts participation rates for all examinees, not just for first-time examinees. In addition, no data were available for fall 2005, summer 2006, or fall 2006.

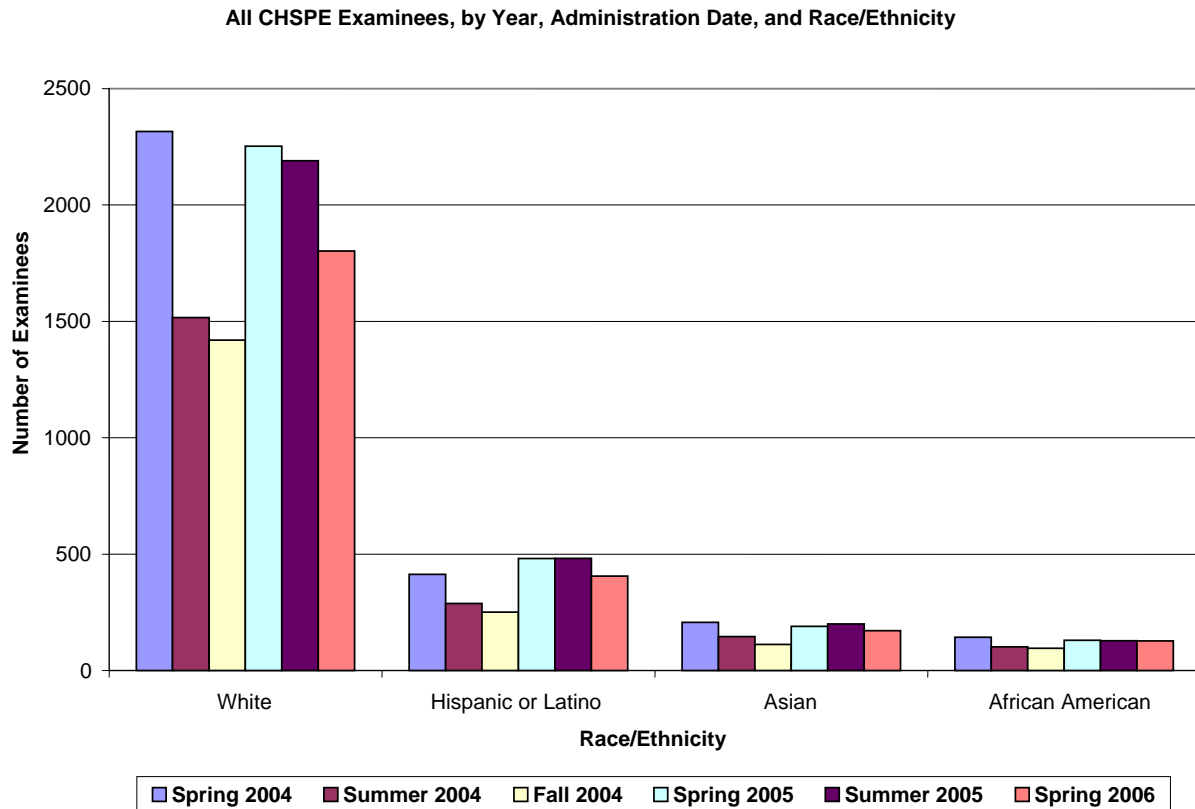


Figure 5.11. CHSPE participation rates in chronological order for all examinees, by year, administration date, and race/ethnicity.

Figure 5.11 depicts the participation rates for different demographic groups in chronological order. It is important to note that the spring and summer administrations tend to be larger for all demographic groups across all years. Thus, a somewhat cyclical nature may be expected within each racial/ethnic group, with more examinees participating each spring and summer and fewer participating in the fall. Given the cyclical nature of the data and the lack of available data for fall 2005, summer 2006, and fall 2006, it might also be beneficial to examine racial/ethnic trends within each administration time (spring, summer, and fall). Figure 5.12 depicts the racial/ethnic trends within each administration window.

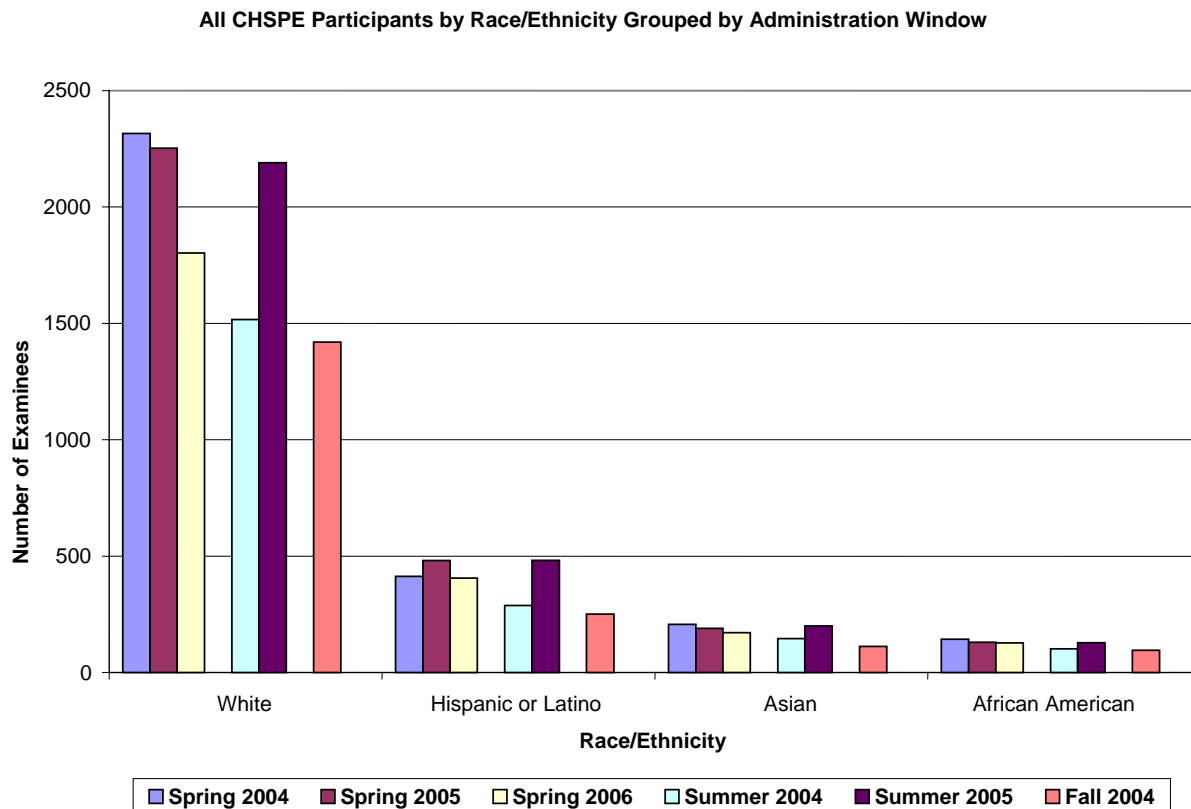


Figure 5.12. CHSPE participation rates grouped by administration window for all examinees, by year and race/ethnicity.

Figure 5.12 demonstrates the trends within each administration opportunity across years rather than providing a simple chronological picture. Interpreted together, figures 5.11 and 5.12 suggest that the trends within the different racial/ethnic groups are mirroring the trends within the general population. The number of examinees increased from 2004 to 2005 within all of the racial/ethnic groups, with the most substantial increase occurring in the summer administration. In 2006, however, the number of CHSPE participants within all racial/ethnic groups seems to be on the decline from 2005 participation. Given that data were only available for one 2006 administration, conclusions about participation within demographic groups should be made with caution. The data available at the time of this report did not seem to suggest that an increase in CHSPE participation occurred for any demographic group in the year that passing the CAHSEE became required for graduation, but these data should be reexamined after more results are available. Presently, however, the tentative conclusion for the CHSPE seems to mirror that for the GED: there does not appear to be a noticeable increase in seeking the CHSPE Certificate of Proficiency as an alternative to the traditional high school diploma.

Graduation Rates

Another indicator that could conceivably be affected by the CAHSEE requirement is the high school graduation rate. At the time of this report, statewide graduation rate information was not available for the Class of 2006, the first class whose members would be denied a diploma if they did not pass both sections of the CAHSEE. The graduation rate reported publicly by CDE is based upon the NCES definition: the numerator is the number of graduates in Year 4 and the denominator is the sum of the number of graduates in Year 4, plus the dropouts in grades 9–12.

Inspection of Figure 5.13 reveals that the graduation rate dropped by .6 percentage points from 2003–2004 to 2004–2005. No direct effect of the CAHSEE can be determined at this point, but the tracking of these rates over time will provide a context when the Class of 2006 graduation rates are available.



Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>)

Since the last independent evaluation report (dated September 2005), information from 2003 to 2004 school year has been updated.

Figure 5.13. Graduation rates.

College Preparation (SAT/ACT/UC & CSU courses)

Indicators of educational quality include the rigor of coursework undertaken in high school, as well as the proportion of students intending and prepared to engage in postsecondary education. We turn now to two sets of indicators (other than the CAHSEE) of student preparedness for college.

College Entrance Examination Participation and Performance

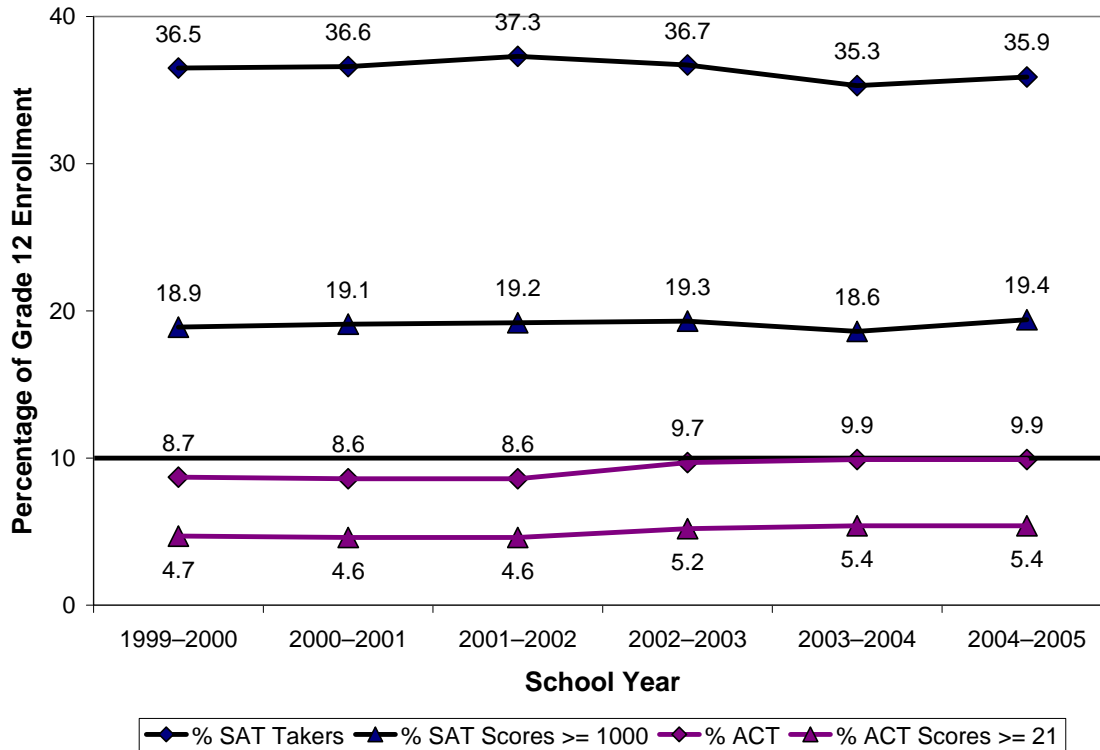
The level of student engagement in education (and aspirations for further education) is reflected in the proportion of students who sit for college entrance examinations. College readiness can also be examined by looking at the performance of students who take such tests. These two factors are confounded, in that higher participation may be related to lower scores overall. For example, if only a small, high performing proportion of a class takes an exam, scores will be high but participation will be low. If a larger number of students, who may be less high performing, are encouraged to test, the average scores will drop but participation rates will increase. Interpretation of patterns requires judicious care because of this confounding effect.

Two college-entrance examination programs are prevalent in the United States: the SAT and the ACT. Figure 5.14 indicates the percentage of California students participating in these two examination programs. The lines with diamond-shaped markers represent the proportion of the Grade 12 class who took either the SAT or ACT. Approximately 35 percent of the Class of 2004 took the SAT and almost 10 percent took the ACT. The percentage of seniors taking the SAT dropped slightly in the last two years available here, from 37.3 percent to 35.3 percent.⁵ ACT participation increased somewhat, from 8.6 percent to 9.9 percent, over that same period.

Figure 5.14 also shows the percentage of students who achieved a particular score on these two exams, over time. These cut points are used for reporting on the CDE Web site and hence are used here. The lines with upward-arrow pointers reflect the percentage of students achieving a minimum combined score of 1000 on the SAT or 21 on the ACT, respectively.⁶ The percentage of California students reaching an ACT score of at least 21 has increased over time, reaching its highest level within this timeframe (1999–2000 to 2004–2005) of 5.4 percent in the 2004–2005 school year. On the other hand, the percentage of students reaching at least 1000 on the SAT was at 18.6 percent, its lowest level in this 5-year timeframe, in the 2003–2004 school year. In the 2005 school year, the percentage of students reaching at least 1000 on the SAT increased to 19.4 percent.

⁵ The College Preparation Partnership Program (CPPP) was in effect from 1999 to 2003. The program was established by SB 1697 to provide access to preparation courses for SAT and ACT to students in qualifying high schools. Grants were awarded to high schools to fund training with reimbursement once students took the SAT I. Student participation in this program dropped somewhat in 2002–2003 (from 19,684 the previous year to 14,823) and the program ended in 2003. The effects of this program's activities and termination may account for some of the test-taking trends seen in Figure 6.8.

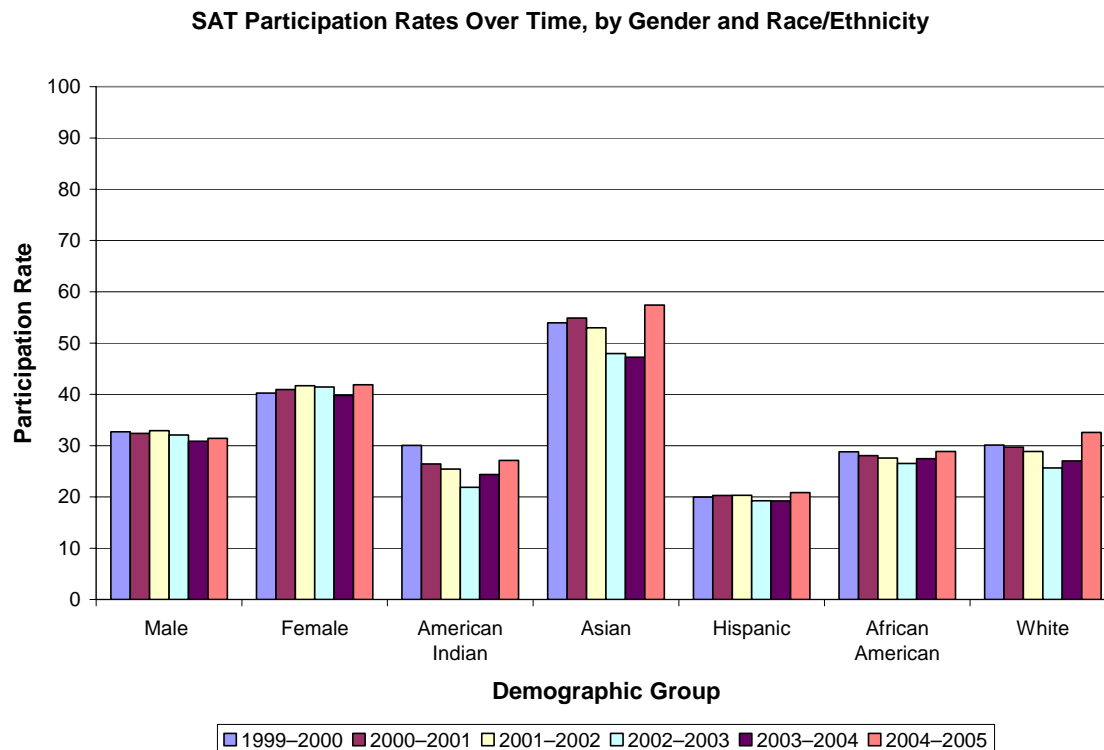
⁶ The national rank for a combined SAT score of 1000 is the 45th percentile. The national rank for an ACT Composite score of 21 is the 57th percentile.



Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>)

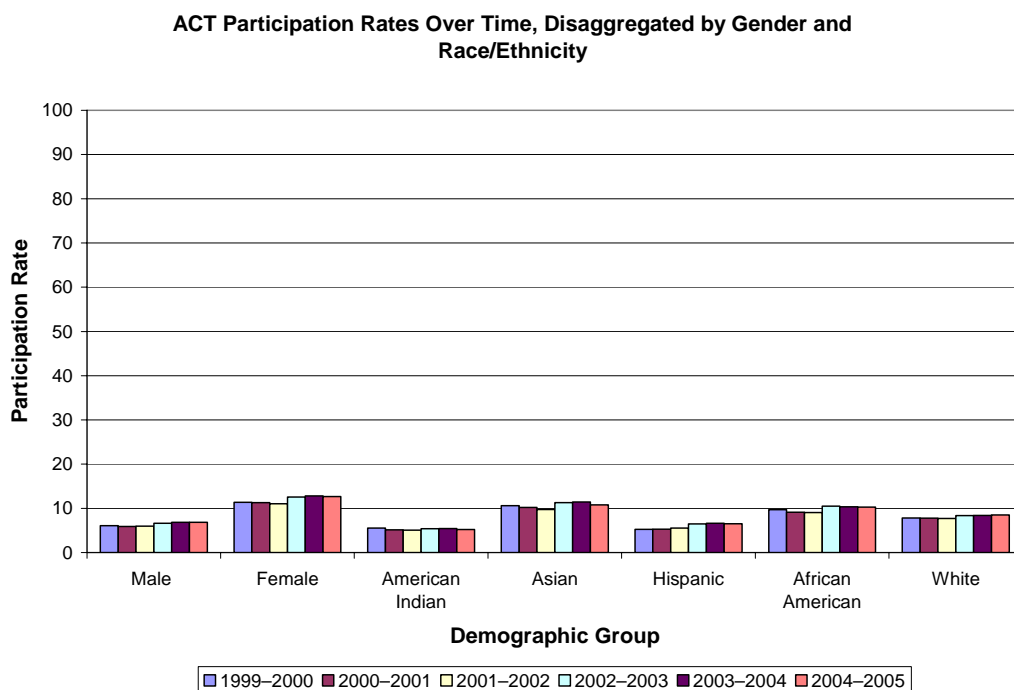
Figure 5.14. SAT and ACT participation rates and success rates over time.

Figure 5.15 depicts SAT participation rates over time, disaggregated by gender and race/ethnicity. While rates vary across these demographic groups with some consistency over time, notably all groups had increased participation rates in 2004–2005 over the previous year. Figure 5.19 provides a similar view of ACT participation rates. Here, too, different demographic groups participate at consistently different rates, yet within demographic group there is little variability over time.



Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>)

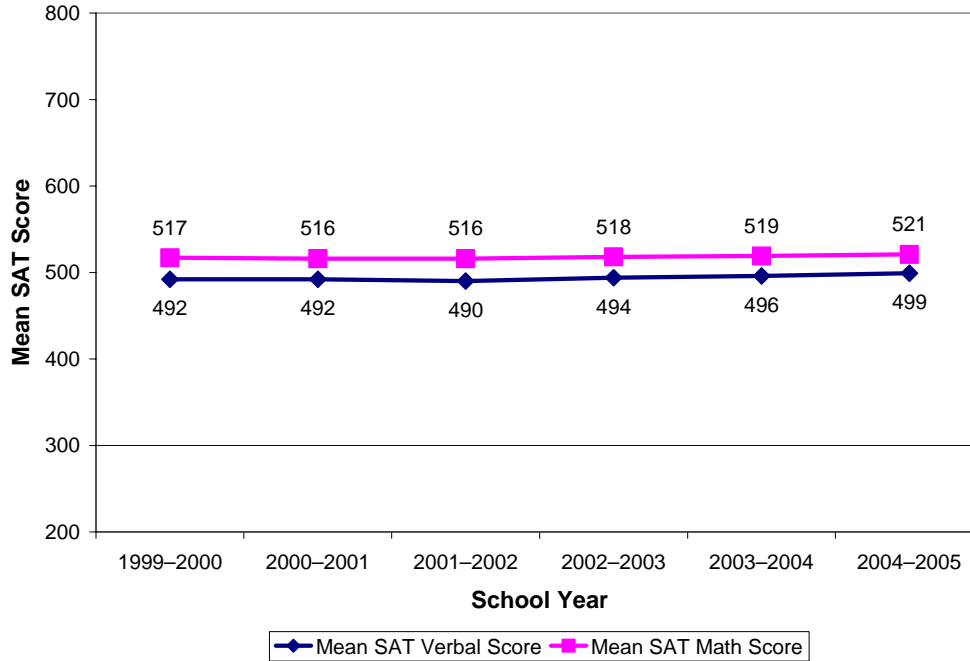
Figure 5.15. SAT participation rates over time, by gender and race/ethnicity.



Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>)

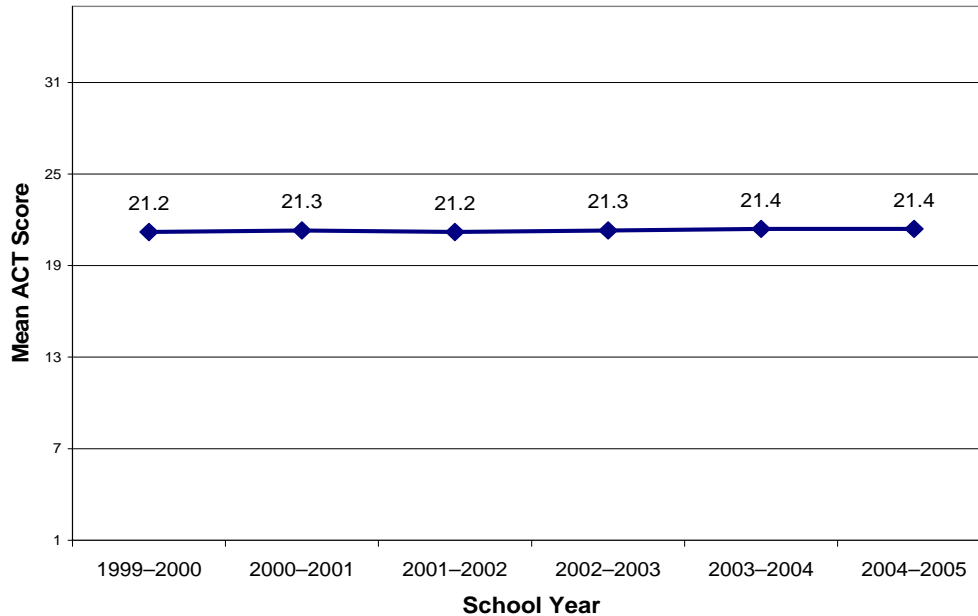
Figure 5.16. ACT participation rates over time, by gender and race/ethnicity.

Another metric to assess success on tests such as the SAT and ACT is to look at mean scores. Figure 5.17 indicates that mean SAT math and verbal scores have steadily, albeit slowly, increased each year since 2001. Figure 5.18 shows a similar pattern of increasing mean scores on the ACT exam.



Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>)

Figure 5.17. SAT mean math and verbal scores over time.



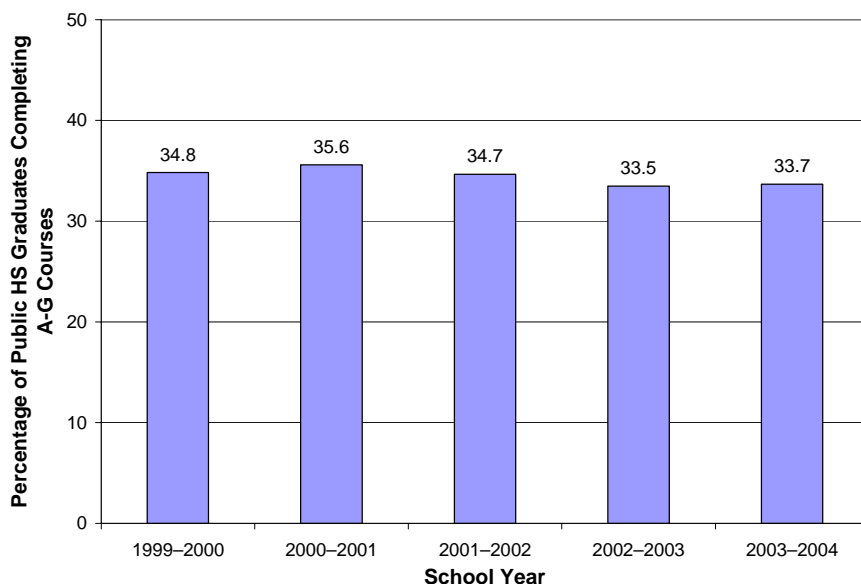
Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>)

Figure 5.18. ACT mean scores over time.

College Preparatory Coursework

Another indicator of educational quality is the caliber of coursework completed. Two of California's statewide university systems, the University of California and the California State University, have developed a list of courses known as "A–G courses" that are required for incoming freshmen. This list includes 16 units of high school courses, of which at least seven must be taken in the last two years of high school. In this system, a unit represents a full year—or two semesters—of study.

Figure 5.19 indicates the percentage of public high school graduates who completed A–G courses over several years. The rate has held fairly steady at about a third of the graduating class each year. There has been a slight decrease since a peak in 2001. The most recent data available on the California Postsecondary Education Commission (CPEC) Web site references the Class of 2004; 33.7 percent of this class completed the A–G courses.



Source: California Postsecondary Education Commission Web site (www.cpec.ca.gov). More recent data could not be found as of July 10, 2006.

Figure 5.19. A–G course completion over time.

The CPEC Web site provides a variety of breakdowns of the A–G course completion information. While Figure 5.19 depicts rates of course completion as a percentage of high school graduates, Table 5.5 reports these rates as a percentage of freshman enrollment four years earlier. This table also provides a breakdown by race/ethnicity and gender. For example, the number of African American males completing A–G courses in the Class of 2004 was 11 percent of the number of African American male freshmen in 2000–2001.

Table 5.5. A–G Course Completions as a Percentage of Freshmen Four Years Earlier, by Race/Ethnicity and Gender

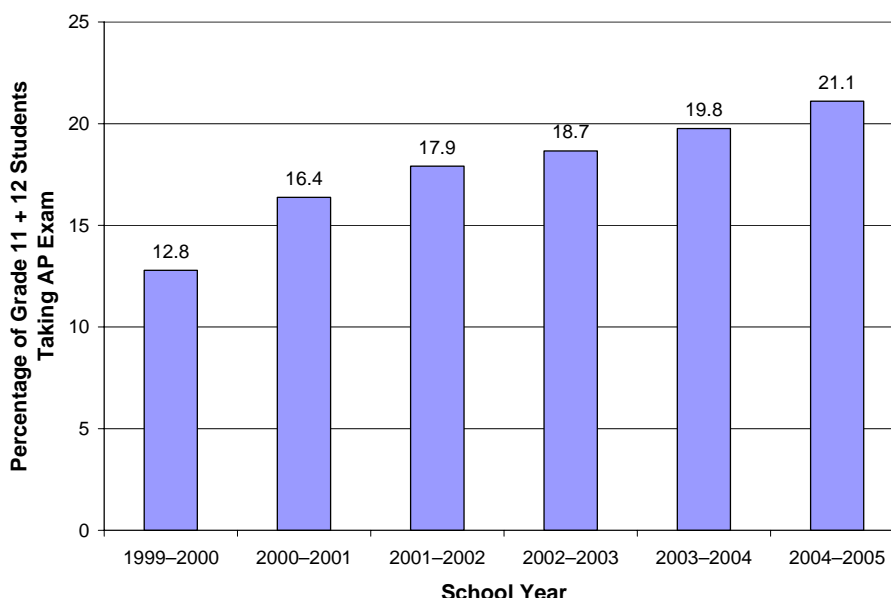
Ethnicity	Gender	Graduation Year (Class)				
		2000	2001	2002	2003	2004
African American	Male	12%	11%	11%	11%	11%
	Female	18%	18%	19%	19%	19%
Native American	Male	13%	12%	14%	15%	16%
	Female	18%	19%	19%	20%	20%
Asian	Male	45%	45%	45%	45%	45%
	Female	56%	57%	57%	57%	59%
Pacific Islanders	Male	15%	17%	17%	17%	19%
	Female	20%	21%	23%	24%	23%
Latino	Male	10%	10%	10%	10%	10%
	Female	15%	16%	16%	16%	17%
White	Male	27%	27%	26%	26%	26%
	Female	35%	36%	36%	36%	37%
Filipino	Male	33%	33%	32%	35%	35%
	Female	47%	48%	46%	48%	49%
Overall		24%	24%	24%	24%	24%

Note. Data retrieved from <http://www.cpec.ca.gov/Accountability/AtoGReport.ASP> July 10, 2006. Race/ethnicity designations differ from the rest of this report but mirror those on the CPEC Web site. Information has not been updated since the previous CAHSEE evaluation report (September 2005).

AP Test Achievement

The College Board's Advanced Placement (AP) program comprises a set of college-level courses offered in high school. Students have the option of taking a standardized AP examination after completing the course to earn college credit and/or gain placement in advanced college courses. AP exam participation rates and scores are indicators of high school course rigor as well as college-going intentions. The College Board currently offers 34 AP courses and exams over 19 subject areas, but not all courses are offered at all high schools.

Figure 5.20 displays AP examination participation rates among California students over time. Each bar represents the percentage of juniors and seniors taking at least one AP exam in a given school year. The rates increased every year between 1999–2000 and 2004–2005, the most recent year available on the CDE Web site.

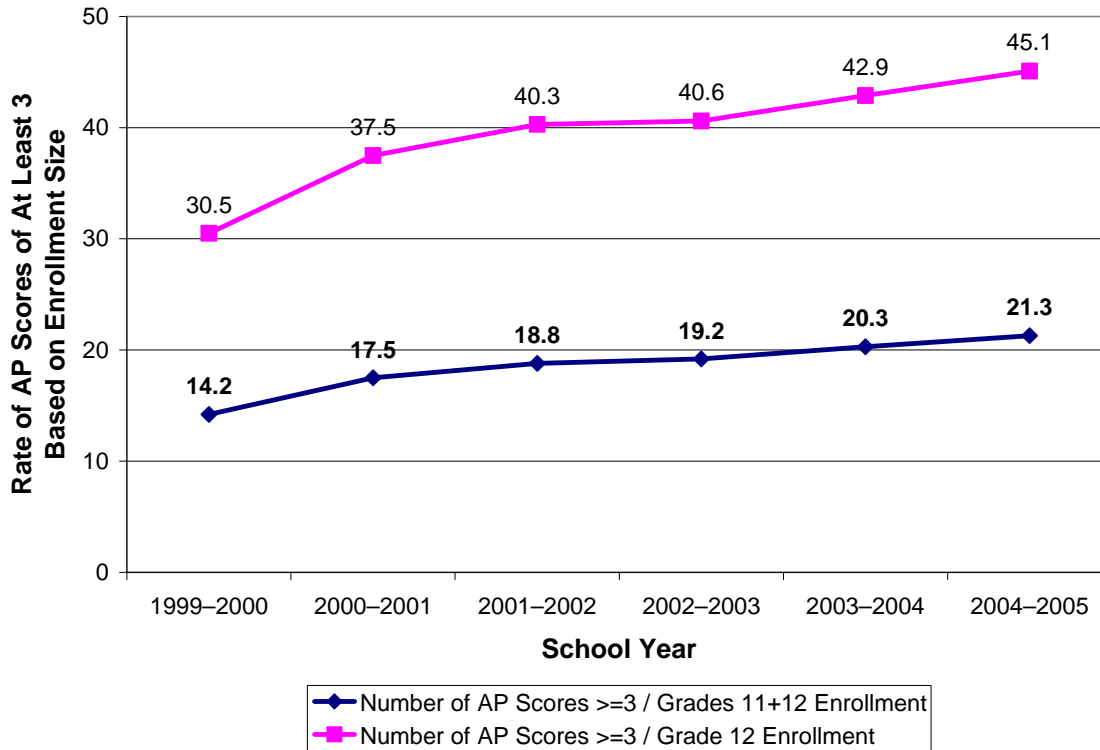


Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>)

Figure 5.20. AP participation rates over time.

The CDE Web site also reports AP pass rates over time. These data are summarized in Figure 5.21 but require some explanation. The numerator in each calculation is the number of AP tests on which a score of 3 or greater⁷ was earned. The denominator for one line is grade 12 enrollments; the denominator on the other line is total grade 11 and grade 12 enrollment. Note that students who earned a score of 3 or better on multiple AP exams were counted multiple times in the numerator, but only once in the denominator. Therefore, the rate of 14.2 percent pass rate among 12th graders in 1999–2000 does not indicate that 14.2 percent of high school seniors earned AP credit; in fact, Figure 5.20 indicates that only 21.1 percent of seniors and juniors took one or more AP exams. However, these rates are useful to assess overall AP impact over time. Inspection of Figure 5.21 reveals that AP pass rates have increased over time. This is an indirect indicator of more students taking a higher number of more rigorous high school courses. AP exam scores are on a scale of 1–5. Typically postsecondary institutions grant credit or advanced placement for minimum scores of 3 or 4. A score of 3 is a commonly accepted indicator of success on an AP exam.

⁷ AP exam scores are on a scale of 1–5. Typically postsecondary institutions grant credit or advanced placement for minimum scores of 3 or 4. A score of 3 is a commonly accepted indicator of success on an AP exam.



Source: California DataQuest System (<http://data1.cde.ca.gov/dataquest>)

Figure 5.21. AP pass rates over time (i.e., number of AP exam scores ≥ 3 as a percentage of student enrollment).

College/University Enrollment

We turn toward college and university enrollment as an indicator of the extent to which high schools are preparing—and perhaps encouraging—students to continue their education beyond high school. Information presented here was gathered from the California Postsecondary Education Commission (CPEC) Web site. CPEC reports information about enrollments in various strata of California colleges and universities (i.e., University of California (UC), California State Universities (CSU) and California Community Colleges (CCC)) over time. Enrollment data are provided for all college-level students, as well as first time freshmen from public and private California high schools. Data regarding California high school graduate enrollment as first-time freshmen are provided here with a caveat; these data do not indicate the number or percentage of California high school graduates who enroll in out-of-state schools. Therefore these data are not presented as a complete and direct measure of college attendance after high school, but only as a partial picture.

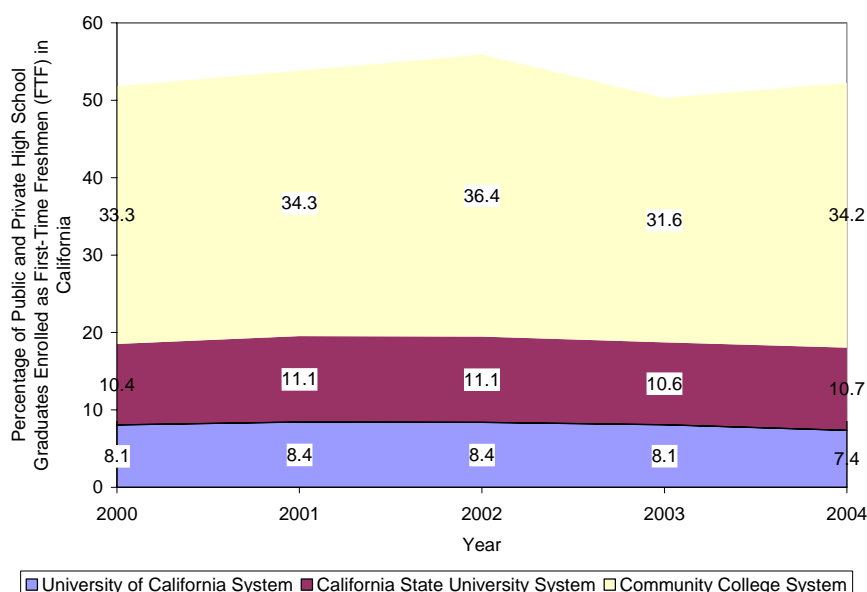
Table 5.6 lists counts of public and private high school graduates, public school graduates completing A–G courses, and first-time freshmen enrollments by California system and overall, for five years.

Table 5.6. California Postsecondary Education Commission (CPEC) Counts of High School Graduates and First-Time Freshmen Enrollments

Year	High School Graduates			First-Time Freshmen			Total
	All	Public	A-G Courses	UC	CSU	CCC	
2000	340,462	309,866	107,926	27,443	35,564	113,351	176,358
2001	344,217	316,124	112,469	28,949	38,291	118,003	185,243
2002	356,685	325,895	112,934	29,870	39,574	129,929	199,373
2003	373,162	341,078	114,194	30,133	39,728	117,833	187,694
2004	375,940	343,481	115,680	27,663	40,164	128,638	196,465
2005	NA	NA	NA	28,727	44,813	124,438	197,978

Source: California Postsecondary Education Commission Web site (<http://www.cpec.ca.gov/>)

Figure 5.22 reports the same enrollment in the three strata of California universities and colleges, as a percentage of public and private high school graduates. Inspection of the figure indicates that enrollment in University of California and California State University schools, as a percentage of public and private high school graduates, has decreased somewhat in 2003 and 2004. However, once enrollment in community colleges is included, overall enrollment increased slightly in 2004—to a total of 52.3 percent across all three systems.



July 10, 2006. Information has not been updated since the previous CAHSEE evaluation report (September 2005).

Figure 5.22. Percentage of California public and private high school graduates enrolling as first time freshmen in California colleges and universities

Summary Findings

Data sources outside the CAHSEE program provide indications of the state of education in California, and can be used to draw out possible effects of the CAHSEE program on education as a whole. Since statewide data are not yet available for the Class of 2006—the first class held to the CAHSEE requirement as a condition of obtaining a high school diploma—direct effects cannot be assessed at this point. Arguably, any effects may not be apparent until after the relevant data files for the Class of 2006 graduation rate are ready for analysis. However, we present these trends in CAHSEE evaluation reports as a forward look at potentially relevant indicators.

One important indicator of the impact of the CAHSEE requirement is whether the proportion of students who leave high school without a diploma changes in some way. The definition of a high school dropout is a controversial topic so we approached the question in multiple ways. Official dropout rate calculations indicate that both single-year and four-year dropout rates increased slightly in 2004, then decreased in 2005. These results should be interpreted with caution because CDE amended its definition of dropouts in 2003; it now aligns with federal NCES guidelines. Inspection of enrollment levels, by grade and over time, was used as a proxy for existing calculations of dropout rates. Enrollment patterns indicate that the drop-off rate from 9th to 10th grade has risen above recent historical levels for the Class of 2008; however, rates for recent classes have been declining in the 11th grade and volatile in the 12th grade. This may be an artifact of changes in retention rates that are not directly measurable. We found no evidence of students flocking to alternative high school-level certificates such as GED and CHSPE after the CAHSEE was implemented.

High school graduation rates declined for the Classes of 2003, 2004, and 2005—classes that preceded the CAHSEE requirement. The statewide graduation rate for the Class of 2006 was not available at the time of this report.

Participation in, and performance on, college entrance examinations show promising trends in 2005. The percentage of students taking the SAT exam decreased in 2003 and 2004, then recovered somewhat in 2005. The percentage of students earning a combined SAT score of 1000 or greater also declined in 2004, then in 2005 rose to its highest rate since at least 2000. The mean SAT score increased slightly over that same time period. The percentage of students taking the ACT exam increased in 2004 and remained flat in 2005; the same pattern can be seen in mean ACT scores, as well as in the percentage of students earning a composite score of 21 or better.

Rates of completion of A–G courses dropped in 2003 but recovered somewhat in 2004; 2005 data are not yet available. Meanwhile, participation in AP exams, and scores of 3 or greater on those exams, have steadily increased since 2000.

Percentages of enrollment of California high school graduates as first time freshmen decreased in both University of California and California State University institutions in 2003 and 2004, while enrollment rates in California community colleges dropped in 2003 then increased in 2004. Data for 2005 enrollment rates are not yet available.

Chapter 6: Key Findings and Recommendations

Introduction

HumRRO gathered, analyzed, and reported a wide range of information during our CAHSEE evaluation of the 2005–06 school year. This information has implications for most aspects of the CAHSEE from the development of the test itself to how it is used and its impact on specific groups of students. In this final chapter, we provide a discussion of key findings from the various evaluation activities. As in prior reports, we offer a number of recommendations for further improving the CAHSEE and its use.

Key Findings

Evaluation activities in 2006 included analysis of test results, the survey of a longitudinal sample of schools, and identification and analysis of potential indicators of CAHSEE impact. The detailed review of test questions and broad survey of instruction conducted in 2005 were not repeated during the past year. Thus, key findings from this year's activities focus more on the implications of test results and other outcome indicators and less on instruction or the quality of the test.

CAHSEE Test Results

We begin this section with several findings about students' success in passing the CAHSEE.

Finding 1: Twelfth graders who had not yet passed the CAHSEE continued to work to pass and many did, but nearly 40,000 students did not.

HumRRO's estimates of the numbers of students in the Class of 2006 who did or did not pass the CAHSEE by June 2006 are shown in Table 2.12. Excluding those students in special education, who were exempted from the CAHSEE requirement for 2006, about 75,000 students entered their senior year still having to meet the CAHSEE requirement. Just over 36,000 of them met the requirement by June 2006; just under 39,000 did not.

Responses to the student questionnaire indicate that students were, in fact, working hard to meet the requirement. Only 21 percent of 12th graders taking the CAHSEE reported that they did not have to work harder to meet the CAHSEE requirement after taking the ELA test and only 17 percent gave this response after taking the mathematics test (see Table 2.50). More than 40 percent said they were working harder in the courses they were taking and 20 percent said they were taking additional courses because of the CAHSEE requirement. About 15 percent said that they were getting help outside the classroom and 10 percent said they were repeating a course to learn the material better.

Finding 2: Passing rates through 11th grade for the Class of 2007 and the 10th grade for the Class of 2008 were the same as the corresponding rates for the Class of 2006.

By the end of 11th grade, 78.7 percent of students in the Class of 2007 met the CAHSEE requirement, compared to 78.4 percent of students in the Class of 2006. (See Table 2.23.) Cumulative passing rates for 11th graders in the various demographic groups were also nearly identical for 2006 and 2005. Approximately 90 percent of White and Asian 11th graders had met the requirement compared to 69 percent of Hispanic students and 64 percent of African American students. (Both rates were up one percentage point in 2006). The cumulative passing rate for economically disadvantaged 11th graders increased over one point, from 66.3 percent to 67.7 percent, but the passing rate for students in special education programs dropped 2 percentage points, from 35.5 to 33.5. The latter results may have been related to ongoing confusion as to whether the exemption for special education students would be extended to the Class of 2007.

Overall, 65 percent of this year's 10th graders (Class of 2008) met the CAHSEE requirement, the same percentage as in 2005. As shown in Table 2.24, the passing rate increased slightly for Native American (from 60 to 61%) and Hispanic (from 51 to 52%) students, but dropped for English learners (from 31 to 27%).

Results for Specific Populations

Finding 3: Students in demographic groups with low pass rates (minorities, economically disadvantaged students, and students with disabilities) in schools with a high proportion of similar students have lower passing rates than students in these groups in schools with fewer similar students.

Over 40 percent of schools with relatively high densities of Hispanic (more than 60%) or African-American (more than 12%) students had ELA Hispanic and African American passing rates under 50 percent, while only 6 percent of schools with low densities of Hispanic students (< 20 percent) and 9 percent of schools with low densities of African American students (< 4 percent) had Hispanic and African-American passing rates under 50 percent. For mathematics, the difference between schools with high and low densities of minorities was even more dramatic. Over 48 percent of schools with high densities of Hispanics had Hispanic passing rates below 50 percent compared to only 7 percent of schools with low densities of Hispanics. Similarly, schools with high densities of economically disadvantaged students, English learners, and students with disabilities had lower passing rates for these targeted groups than schools with lower densities. (See Tables 2.32 and 2.33 for more details.)

Finding 4: As noted previously, English learners who are reclassified as fluent in English were largely successful in passing the CAHSEE. A significant new finding is that many students are still classified as English learners after as many as 10 years of education in this country.

Approximately 79,000 tenth grade students had previously been English learners but were now reclassified as fluent in English. Students who had been reclassified passed both the ELA and mathematics tests at higher rates than students in general (78% passed both tests compared to 65% of all 10th grade students). Former English learners who were recently (in the past 3 years) reclassified as proficient in English had lower passing rates compared to students who had been reclassified as proficient for 4 or more years.

Approximately 90,000 10th grade students remained classified as English learners. Supplemental analyses of data on English learners revealed that many students have been classified as English learners for a long time, without reaching proficiency in English. More than half of the 10th graders still classified as English learners have been registered in U.S. schools for 10 years or more. In comparison to more recent enrollees, English learners who have been in U.S. schools longer (more than 7 years) were more likely to be economically disadvantaged, more likely to be in special education programs, and more likely to be classified as having a specific learning disability. Recent enrollees had more difficulty with the ELA test than with the mathematics test.

Finding 5: The population of students receiving special education services is quite diverse. Some need only a little more help to master the skills tested by the CAHSEE, while at least a quarter are not participating in the regular curriculum and have little chance of mastering the required skills.

Our analysis of 2006 CAHSEE results for students with disabilities again revealed a strong relationship between the types of special education services a student receives and success on the CAHSEE. More than one third of the students analyzed received non-intensive services such as in-class accommodations or a resource specialist and were able to spend more than 80 percent of their time in regular instruction (Tables 3.14 and 3.15). About half of the students who participated in regular instruction passed the CAHSEE while still in 10th grade. Students in this category who had not passed in the 10th grade showed significant gains when they retested in the 11th and 12th grades (Tables 3.18 and 3.19). It seems likely that with continued assistance these students will have a good chance of meeting the CAHSEE requirement. It is thus reasonable to ask that both the schools and these students themselves continue to work to meet the required standards.

About one quarter of the students receiving special education services required intensive assistance. These students participated in regular instruction less than 20 percent of the time and only about 10 percent of them passed the CAHSEE during the 10th grade. Those who retested in the 11th and 12th grades showed only small gains in CAHSEE scores compared to other students.

Curriculum and Instruction

Finding 6: Most examinees report that topics on the CAHSEE were covered in courses that they took, although some indicated that they had difficulty with these topics when they were taught. In mathematics, many of the students who report that CAHSEE topics were not covered in their courses have not yet taken required courses (e.g., Algebra I).

Overall, only 7 percent of all 10th graders and 16 percent of 11th and 12th graders still trying to pass the CAHSEE ELA test said that many topics on that test were not covered in their courses (Table 2.48). Similarly about 9 percent of all 10th graders and 16 to 17 percent of 11th and 12th graders still trying to pass the mathematics test said that many of the topics on that test were not covered in their courses. Of the 12th graders who reported that topics were not covered, more than a quarter had not taken Algebra I, a course required for graduation, and 23 percent more reported taking Algebra I in the 12th grade and so had not yet completed the course.

Finding 7: Principals indicated that CAHSEE has had a positive influence on instruction and that they are implementing new ways to identify students that need additional help.

The percentage of principals reporting having implemented plans to assist students who may have difficulty passing the CAHSEE increased sharply in several areas. In 2006, 46 percent of the principals reported having fully implemented plans to increase remedial courses and another 37 percent reported having partially implemented such plans (Table 4.15). The 83 percent who said they fully or partially implemented remedial courses compares to only 58 percent who responded this way in 2004 and 43 percent in 2002. Similarly, the percentage of principals who reported fully or partially implementing plans to increase summer school offerings rose from 31 percent in 2004 to 67 percent in 2006 and the reported number implementing plans to provide tutoring rose from 40 percent in 2004 to 96 percent in 2006. The percentage of principals who reported that they have plans to ensure all high school students receive instruction in each of the content standards also increased from 53 percent in 2004 to 71 percent in 2006 (Table 4.16).

Finding 8: Fewer principals listed teacher access to in-service training on content standards and instructional techniques as a key strategy to promote student learning.

The percentage of principals in our survey listing teacher access to in-service training on content standards as a strategy to promote student learning dropped from 73 percent in 2004 to 57 percent in 2006 (Table 4.13). The percentage listing teacher access to training on instructional techniques dropped similarly from 64 percent to 48 percent. In both cases, there had been an increase in the percentage of principals listing these strategies in 2004. The 2006 response rates were similar to responses rates from our 2002 survey.

Finding 9: Teachers found the CAHSEE Teacher Guide to be useful, but many indicated they were unfamiliar with the CDE Web site.

We repeated a question from earlier surveys about the CAHSEE Teacher Guide, but did not ask about other material, such as released test items, that became available more recently. Approximately 65 percent of the teachers responding to our survey (68 percent of the ELA teachers and 63 percent of the mathematics teachers) indicated that the CAHSEE Teacher Guide was very or somewhat useful (Table 4.9). About 20 percent said they were unfamiliar with the Teacher Guide and only 1 percent reported that the Teacher Guide was not at all useful. By contrast, only 45 percent of the ELA teachers and 52 percent of the mathematics teachers found the CDE Web site to be very or somewhat useful, whereas 41 percent of the ELA teachers and 31 percent of the mathematics teachers said that they were not familiar with the site.

Other Outcome Indicators

Finding 10: While there are several ways of computing dropout rates, results show that dropout rates from 10th through 12th grade have declined in the years since the CAHSEE requirement was established.

The CAHSEE requirement was enacted in 1999. Enrollment declines from 10th to 11th grade dropped sharply beginning in 2002 with the Class of 2004 and continued to decline this year for the Class of 2007 (Table 5.3). Enrollment declines from 11th to 12th grade dropped even more dramatically beginning in 2002 with the Class of 2003 (from 10.6 to 8.1 percent) and have been below 8 percent for subsequent classes (Table 5.4). There was, however, a modest increase in the 12th grade enrollment decline this year for the Class of 2006 (from 7.2 percent back up to 7.8 percent). While small in comparison to the earlier decrease, it may be significant because Class of 2006 is the first group required to pass the CAHSEE.

California also reports 4-year high school dropout rates. The method for computing these rates changed significantly in 2003, so it is difficult to make comparisons between current rates and rates prior to 2003. Both the 1-year and 4-year dropout rates reported by the U.S. Department of Education and the California Department of Education declined slightly in 2005, the most recent year for which data were available. Note, however, that recent research has shown these 4-year dropout rates may be unrealistically high because 9th grade enrollments are inflated by students who repeat 9th grade (Warren, 2005). An alternative figure is obtained by using prior-year 8th grade enrollment to estimate the number of *first-time* 9th graders in a given year and then using this as the base for calculating 4-year dropout rates. At the same time, dropout rates may be unrealistically low because of the exclusion of students entering GED programs and students whose school status is uncertain.

Finding 11: Participation in Advanced Placement programs and scores on college placement tests both increased in 2005. Efforts to help students meet the CAHSEE requirement have not hurt more advanced students.

The proportion of 11th and 12th graders taking Advanced Placement courses and scoring 3 or better on the Advanced Placement Tests has increased steadily from about 14 percent during the 1999–2000 school year to 21 percent in the 2004–2005 school year, the most recent year for which data are available.

Recommendations

As in past years, we offer several general recommendations based on observations and findings from our evaluation activities. These recommendations are targeted to the Board and the legislature as they consider additions or modifications to policies concerning the CAHSEE and its use. We also offer two more technical recommendations for the continued improvement of the CAHSEE. These latter recommendations are targeted to CDE and to the test developers.

Key Policy Recommendations

General Recommendation 1: CDE worked to publicize options for students who do not complete the CAHSEE requirement in time to graduate with their class. Now data are needed on how many students take advantage of different programs and on the effectiveness of each program in helping students to learn essential skills and earn their diplomas.

Currently, little statewide information is available on the number of students who did not graduate in June 2006 solely because of the CAHSEE requirement, on how many of these students are still trying to meet the CAHSEE requirement, and on what they are doing to help them meet the requirement. A number of students from the Class of 2006 who did not pass by June did participate in the July CAHSEE administration. Most were shown as still being 12th graders in the same schools they had been in the year before. Some were identified as now being in an Adult Education program. To date, no information is available on students who might continue to pursue a diploma through a community college program or on how many may be attempting to obtain a GED rather than a regular diploma.

Information on how many students are still working to earn a high school diploma and on the programs they are using to do so is needed in order to make policy decisions about how best to encourage and support students in these pursuits and how to encourage other students to continue to try to earn the diploma rather than giving up on their education.

General Recommendation 2: In addition to continued efforts to help seniors who have not yet passed the CAHSEE, work is needed to improve programs for juniors who did not pass in the 10th grade and even more importantly to improve programs to prepare students to be ready to pass on their first try as 10th graders.

Given the intense attention necessarily paid to last year's 12th graders, who were in the first class to face the CAHSEE requirements, the absence of improvement in passing rates for 10th and 11th graders may not be surprising. The long-term solution to helping all students meet the CAHSEE requirement must involve preparing more of them to pass in the 10th grade and improving immediate remediation efforts for those students who do not do so. CDE might work with districts to set goals for increasing the passing rates of 10th and 11th graders and to identify strategies for meeting these goals.

For mathematics, results presented in Chapter 2 suggest that preparing students to take Algebra I in 8th or 9th grade, rather than deferring this requirement to later grades could improve 10th grade passing rates. The data also suggest that encouraging students to take one or more mathematics courses beyond Algebra I would further improve the likelihood that they would meet the mathematics requirement in the 10th grade.

Another approach that many schools are implementing is to improve systems for earlier diagnosis of student deficiencies in skills tested by the CAHSEE. Providing students who need additional help with remedial services before taking the exam for the first time is an obvious way to improve initial passing rates. High schools might improve coordination with middle schools to use assessment and other diagnostic information collected by the middle schools to identify individual student needs as they enter high school. Coordination with and feedback to middle schools is needed to ensure that all students develop foundational skills and are prepared to benefit fully from the high school curriculum.

General Recommendation 3: Research is needed on why many students remain classified as English learners for long periods of time. CDE should gather lessons from districts and schools that have been more successful in helping students achieve proficiency in English and make this information available to those with lower rates of success.

Initial CAHSEE passing rates for English learners are closely linked to efforts to help these students achieve proficiency in English. Improvements to California's English language development (ELD) programs have allowed many students to attain proficiency within one or two years of entering the U.S. educational system. Many English learners, however, have not been able to reach English proficiency even after many years (e.g., 10 or more years for 10th graders). While there has been research on the effectiveness of ELD programs, more research is needed to identify programs that are particularly effective for students with different barriers to English proficiency.

General Recommendation 4: Districts and the state should provide support and guidance to IEP teams in making key decisions about whether students in special education programs can meaningfully participate in the regular curriculum. Students who can participate in the regular high school curriculum should be held to the same high expectations as the rest of their classmates. At the same time, districts and the state should identify alternative goals and ways of recognizing the accomplishment of these goals for students who are not able to participate meaningfully in the regular curriculum.

As part of a settlement agreement in the Chapman case, legislation was passed exempting Class of 2006 students in special education programs from meeting the CAHSEE requirement. Additional legislation (SB 267) has just been enacted to extend this exemption to special education students in the Class of 2007. Analyses reported in Chapter 3 indicate that the population of students participating in special education programs is quite diverse. Extending a blanket exemption to all of them may not be the most effective approach to ensuring that all students reach their full potential. Instead, California may wish to consider exemptions and alternatives for special education students that are targeted to the curriculum they receive.

General Recommendation 5: Research is needed on factors that lead to lower CAHSEE passing rates in schools with higher concentrations of at-risk students. Programs in schools with high concentrations of at-risk students who are successful in passing the CAHSEE should be identified and information about these programs should be disseminated widely.

Differences in passing rates for minority and disadvantaged students in schools with high and low concentrations of similar students are striking. We cannot tell from the available data whether the differences in passing rates result from differences in program effectiveness or more simply from differences in the nature and needs of the students served. We do know, however, that the low passing rates in schools with high concentrations of at-risk students are not acceptable. More systematic study of differences between high-concentration schools with high passing rates versus those with low passing rates is needed to support the development, dissemination, and implementation of programs to increase success on the CAHSEE for schools serving high proportions of at-risk students.

General Recommendation 6: Data on success in college and other endeavors for students who pass the CAHSEE will be needed soon to determine whether the CAHSEE requirements are sufficiently rigorous.

When the CAHSEE content and passing standards were first established, the State Board of Education signaled its intention to increase the rigor of these standards over time, as the effectiveness of instruction increased. ACHIEVE and other groups

reviewing high school graduation requirements have argued for considerably more rigorous requirements. For example, ACHIEVE argues that all students should be required to take not just Algebra I, but also Geometry and Algebra II in order to be prepared for a challenging college curriculum. Other research has shown that students who come to college unprepared and thus begin by taking remedial, non-credit-bearing courses, have significantly lower chances of completing college.

Many students from the Class of 2006, the first cohort of students subject to the CAHSEE requirement, have now entered college. Collecting data on their success in getting into college and the proportion required to take remedial courses once they got there will provide important information for policy-makers who must decide whether and how much to increase the rigor of the CAHSEE requirement for future high school classes.

More Specific Technical Recommendations

Specific Recommendation 1: CDE and ETS should seek ways to improve scoring consistency for the CAHSEE essays during high volume administrations.

The rate of exact agreement between independent scorers of each student's essay has generally been near 70 percent and the frequency of disagreements by more than one score point has been below 0.5 percent. In both 2005 and 2006, exact agreement rates for the 10th grade essays in the high volume administrations (February and March) was 66 or 67 percent and the frequency rate of disagreements by more than one score point was above 0.5 percent. While variability in the essay scores is only a minor factor in the reliability of the overall scores, it would still be prudent to work to continue to improve scoring consistency. CDE may wish to set explicit targets for scoring consistency, such as 70 percent exact agreement and less than 0.5 percent serious disagreements, and then monitor ongoing progress in meeting these more rigorous targets.

Specific Recommendation 2: The CDE Web site includes a wealth of useful information about the CAHSEE that teachers should find useful. CDE should consider ways to increase teacher familiarity with and use of the CDE Web site.

Between 30 and 40 percent of the teachers responding to our survey said that they are not familiar with the CAHSEE-related materials on the CDE Web site. CDE might consider ways of increasing information about the Web site. In addition, CDE might conduct focus groups to suggest ways to make the Web site even more useful to teachers.

References

- Rabinowitz, S. N., Crane, E.W., Ananda, S., Vasudeva, A., Youtsey, D.K., Shimoizato, C., and Schwager, M. (April 2005). *High school exit examination for pupils with disabilities (Senate Bill 964), Final Report*. San Francisco, CA: WestEd.
- Sacramento County Office of Education: Center for Student Assessment and Program Accountability and Educational Data Systems. (2005). *California high school proficiency examination (CHSPE): Final administration report for the summer 2005 Administration*. Sacramento, CA: Sacramento County Office of Education.
- Sacramento County Office of Education: Center for Student Assessment and Program Accountability and Educational Data Systems. (2006). *California high school proficiency examination (CHSPE): Final administration report for the summer 2006 Administration*. Sacramento, CA: Sacramento County Office of Education.
- Sipes, D.E., Harris, C.D., Wise, L.L., & Gribben, M.A. (2001). *High school exit examination (HSEE): Fall 2000 district baseline survey report (IR-01-01)*. Alexandria, VA: Human Resources Research Organization.
- Warren, J.R. (2005). State-level school completion rates: concepts, measures, and trends. *Education policy Analysis Archives*, 13, 1-37.
- Wise, L.L., Becker, D.E., Harris, C.D., Sun, S., Wang, X., & Brown, D.G. (2004b, September 30). Independent evaluation of the *California high school exit examination (CAHSEE): Year 5 evaluation report*. (HumRRO Final Report FR-04-53). Alexandria, VA: Human Resources Research Organization. [Online]. Available: <http://www.cde.ca.gov/ta/tg/hs/year5.asp>
- Wise, L.L., Becker, D.E., Harris, C.D., Taylor, L.R., Johnstone, C.J., Miller, N.A., Thompson, S.A., Sun, S., Shen, X., Butler, F.L., Wang, X., Koger, L.E., Moody, R., Deatz, R.C., Koger, M.E., Dickinson, E.R., Gensberg, S., Hilton, R.A., Kelley, N.L., & Stevens, C. (2005). Independent evaluation of the *California high school exit examination (CAHSEE): 2005 evaluation report – Volumes 1-3*. (HumRRO Final Report FR-05-43). Alexandria, VA: Human Resources Research Organization. [Online]. Available: <http://www.cde.ca.gov/ta/tg/hs/year6indepeval.asp>
- Wise, L. L., Hoffman, R. G., & Harris, C. D. (2000). *The California high school exit examination (HSEE): Evaluation plan*. Alexandria, VA: Human Resources Research Organization.
- Wise, L.L., Harris, C.D., Sipes, D.E., Hoffman, R.G., & Ford, J.P. (2000a, June 30). *High school exit examination (HSEE): Year 1 evaluation report* (HumRRO Preliminary Report IR-00-27r). Alexandria, VA: Human Resources Research Organization. [Online]. Available: <http://www.cde.ca.gov/ta/tg/hs/year1.asp>

- Wise, L.L., Harris, C.D., Brown, D.G., Becker, D.E., Sun, S., & Coumbe, K.L. (2003b, September 30). *California high school exit examination (CAHSEE): Year 4 evaluation report* (FR-03-64r). Alexandria, VA: Human Resources Research Organization. [Online]. Available: <http://www.cde.ca.gov/ta/tg/hs/year4.asp>
- Wise, L.L., Harris, C.D., Koger, L.E., Bacci, E.D., Ford, J.P., Sipes, D.E., Sun, S., Koger, M.E., & Deatz, R.C. (2003a, May 1). *Independent evaluation of the California high school exit examination (CAHSEE): AB 1609 study report—Volumes 1 & 2*. (HumRRO Final Report FR-03-21). Alexandria, VA: Human Resources Research Organization. [Online]. Available: <http://www.cde.ca.gov/ta/tg/hs/ab1609sr.asp>
- Wise, L.L., Harris, C.D., Koger, L.E., Bacci, E.D., Ford, J.P., Brown, D.G., Becker, D.E., Sun, S., Koger, M.E., Deatz, R.C., & Coumbe, K.L. (2004a, February 1). *Independent evaluation of the California high school exit examination (CAHSEE): Second biennial report* (FR-04-01). Alexandria, VA: Human Resources Research Organization. [Online]. Available: <http://www.cde.ca.gov/ta/tg/hs/biennial04.asp>
- Wise, L.L., Sipes, D.E., George, C. E., Ford, J.P., & Harris, C.D. (2001, June 29). *California high school exit examination (CAHSEE): Year 2 evaluation report* (HumRRO Interim Evaluation Report IR-01-29r). Alexandria, VA: Human Resources Research Organization. [Online]. Available: <http://www.cde.ca.gov/ta/tg/hs/year2.asp>
- Wise, L.L., Sipes, D.E., Harris, C.D., Collins, M.M., Hoffman, R.G., & Ford, J.P. (2000b, August 25). *High school exit examination (HSEE): Supplemental year 1 evaluation report* (HumRRO Supplemental Report IR-00-37). Alexandria, VA: Human Resources Research Organization. [Online]. Available: <http://www.cde.ca.gov/ta/tg/hs/year1sup.asp>
- Wise, L.L., Sipes, D.E., Harris, C.D., Ford, J.P., Sun, S., Dunn, J., & Goldberg, G. L. (2002b, June 28). *California high school exit examination (CAHSEE): Year 3 evaluation report*. (HumRRO Interim Report IR-02-28). Alexandria, VA: Human Resources Research Organization. [Online]. Available: <http://www.cde.ca.gov/ta/tg/hs/year3.asp>
- Wise, L.L., Sipes, D.E., Harris, C.D., George, C. E., Ford, J.P., & Sun, S. (2002a, January 29). *Independent evaluation of the California high school exit examination (CAHSEE): Analysis of the 2001 administration*. (HumRRO Evaluation Report FR-02-02). Alexandria, VA: Human Resources Research Organization. [Online]. Available: <http://www.cde.ca.gov/ta/tg/hs/biennial02.asp>